

# **National Council Licensure Examination(NCLEX-PN)**

**NCLEX NCLEX-PN**

**Version Demo**

**Total Demo Questions: 116**

**Total Premium Questions: 1165**

**Buy Premium PDF**

**<https://passqueen.com>**

**[support@passqueen.com](mailto:support@passqueen.com)**

**PASSQUEEN.COM**

**[support@passqueen.com](mailto:support@passqueen.com)**

## Topic Break Down

| Topic                                             | No. of Questions |
|---------------------------------------------------|------------------|
| Topic 1, Safe and Effective Care Environment      | 8                |
| Topic 2, Coordinated Care                         | 108              |
| Topic 3, Safety and Infection Control             | 126              |
| Topic 4, Health Promotion and Maintenance         | 223              |
| Topic 5, Psychosocial Integrity                   | 169              |
| Topic 6, Physiological Integrity                  | 51               |
| Topic 7, Basic Care and Comfort                   | 75               |
| Topic 8, Pharmacological and Parenteral Therapies | 163              |
| Topic 9, Reduction of Risk Potential              | 81               |
| Topic 10, Physiological Adaptation                | 161              |
| Total                                             | 1165             |



**QUESTION NO: 1**

The licensed practical nurse is assigning care to an experienced nursing assistant.

Which of the following tasks are appropriate to delegate? (Choose all that apply.)

- A. Obtaining vital signs for a stable client
- B. Assisting a stable client with ambulation
- C. Measuring intake and output
- D. Providing routine bathing and hygiene
- E. Teaching a client how to use a walker
- F. Assessing a new complaint of chest pain

**ANSWER: A B C D**

**Explanation:**

Tasks delegated to nursing assistants should be routine, predictable, and within the assistant's training and verified competency. Obtaining vital signs for a stable client, assisting a stable client with ambulation, measuring intake and output, and providing routine hygiene are appropriate delegated tasks. The practical nurse retains responsibility for assessment, clinical judgment, teaching, evaluation, and actions requiring nursing judgment. The nurse must also evaluate the client before delegation and follow up on reported findings. See the [NCSBN delegation resources](#).

**QUESTION NO: 2**

States throughout our nation vary somewhat in terms of things that nursing assistants can and cannot legally do.

Which statements about these state to state differences are accurate? (Choose all that apply.)

- A. Nursing assistants can change catheter tubings but not catheters
- B. Nursing assistants can change sterile dressings
- C. Nursing assistants have an expanding role in many states.
- D. Nursing assistants cannot assess the physical status of the patients.
- E. Nursing assistants can apply topical medication lotions to intact skin.
- F. The trend is moving toward nurses only staffing patterns.

**ANSWER: C D**

**Explanation:**

"Nursing assistants have an expanding role in many states." is accurate because the precise duties a nursing assistant may perform depend on state law, employer policy, documented education, and demonstrated competency. In some jurisdictions and settings, trained nursing assistants may be assigned additional technical tasks, such as obtaining electrocardiograms or collecting specimens, under the appropriate supervision and delegation process. Federal long-term-care requirements also recognize that nurse aides must complete required training and competency evaluation before working as nurse aides, while states may establish requirements that exceed the federal baseline.

"Nursing assistants cannot assess the physical status of the patients." is also accurate in the NCLEX-PN delegation framework. Assessment is a nursing responsibility requiring clinical judgment: the nurse collects and interprets data, identifies changes or concerns, determines priorities, and decides whether a task can safely be delegated. A nursing assistant may observe, measure, and promptly report objective findings or changes, such as abnormal vital signs, skin redness, confusion, or decreased intake. Those observations support the nurse's assessment but do not constitute an independent nursing assessment. The nurse remains accountable for evaluating the patient and acting on reported

information. See the federal nurse-aide training standards at [42 CFR § 483.152](#) and the NCSBN delegation resources at [NCSBN Delegation](#).

### QUESTION NO: 3

You are caring for a neonate who has a cleft palate.

You should inform the mother that surgical correction will be done when the infant is \_\_\_\_\_.

- A. 8 to 12 months of age
- B. 20 to 24 months of age
- C. 16 to 20 months of age
- D. 12 to 16 months of age

### ANSWER: A

#### Explanation:

**8 to 12 months of age** is the appropriate answer. Cleft palate repair (palatoplasty) is generally planned during late infancy, commonly at approximately 9 to 12 months of age, before speech and language development is well established. Repair at this developmental stage helps establish separation between the oral and nasal cavities and supports the infant's ability to develop more typical speech resonance and articulation as language emerges. The timing also allows the infant to grow sufficiently for anesthesia and surgery while still providing early functional reconstruction of the palate.

Care is coordinated through a multidisciplinary cleft or craniofacial team, including surgery, nursing, speech-language pathology, audiology, dentistry, and nutrition services. Before surgery, nursing teaching focuses on maintaining adequate nutrition with specialized feeding techniques and equipment, monitoring growth, and supporting the family. After repair, the child requires ongoing assessment of feeding, hearing, speech, dental development, and facial growth. Timing may be individualized according to the child's anatomy, health status, growth, and the surgical team's protocol, but 8 to 12 months is the standard NCLEX-PN timeframe. See the [Merck Manual's cleft lip and palate guidance](#) and the [American Cleft Palate-Craniofacial Association parameters of care](#).

### QUESTION NO: 4

The nurse is using Cognitive-Behavioral methods of pain control and knows that these methods can be expected to do all the following *except*:

- A. completely relieve all pain.
- B. provide benefit by restoring the client's sense of self-control.
- C. help the client to control symptoms.
- D. help the client actively participate in his or her own care.

### ANSWER: A

#### Explanation:

"completely relieve all pain." is the exception because cognitive-behavioral pain-control methods do not promise or reliably produce total elimination of pain. These interventions use approaches such as relaxation, distraction, guided imagery, attention shifting, coping-skills training, and reframing of pain-related thoughts. Their appropriate goal is to reduce pain-related distress, improve perceived control, strengthen coping, and support function and participation in care—even when some pain remains present. Pain is a multidimensional, individualized experience affected by physical condition, emotions, beliefs, environment, and prior experiences. Therefore, nursing care should establish realistic, patient-centered outcomes rather than guarantee complete pain relief. The nurse should assess the client's report of pain and response to interventions, then combine nonpharmacologic cognitive-behavioral approaches with prescribed pharmacologic and other appropriate measures. The American Nurses Association emphasizes that pain assessment and management should be individualized

and include both pharmacologic and nonpharmacologic strategies. The National Institute of Neurological Disorders and Stroke likewise describes cognitive behavioral therapy as a method that can help people manage chronic pain and its impact on daily life. See the [American Nurses Association pain-management resources](#) and the [National Institute of Neurological Disorders and Stroke information on chronic pain](#).

#### QUESTION NO: 5

When giving an intramuscular injection to an infant.

Which of the following sites is preferred?

- A. Ventrogluteal region
- B. Deltoid
- C. Vastus lateralis
- D. Dorsogluteal region

**ANSWER: C**

#### Explanation:

Vastus lateralis is the preferred intramuscular injection site for an infant because the anterolateral thigh muscle is relatively large, well developed, and readily accessible at this age. It provides adequate muscle mass for medication absorption while avoiding the major nerves and large blood vessels that make some other locations less desirable in young children. Proper landmarking is essential: the injection is administered into the middle third of the anterolateral thigh, using an appropriate needle length and volume based on the infant's age, size, muscle mass, prescribed medication, and clinical guidance. The Centers for Disease Control and Prevention identifies the anterolateral thigh as the recommended intramuscular site for infants and young children, particularly for routine immunizations. This aligns with NCLEX-PN principles of selecting a site that maximizes safety and ensures dependable intramuscular delivery. Current vaccination-administration guidance, including age-based site selection and technique, is available from the [CDC's Vaccine Administration guidance](#) and the [Immunize.org clinical resources](#).

#### QUESTION NO: 6

The nurse is assessing a client who has been on bed rest following surgery.

Which of the following findings are consistent with deep vein thrombosis? (Choose all that apply.)

- A. Unilateral calf swelling
- B. Warmth of the affected leg
- C. Calf tenderness
- D. Redness of the affected leg
- E. Bilaterally absent pedal pulses
- F. Cool, pale toes on the affected leg

**ANSWER: A B C D**

#### Explanation:

Unilateral calf swelling, warmth, tenderness, and redness are findings that can occur with deep vein thrombosis (DVT). A thrombus obstructs venous blood flow, causing inflammation and impaired venous return in the affected extremity. The nurse should promptly report suspected DVT and should not massage the extremity because manipulation could dislodge a thrombus and contribute to pulmonary embolism. DVT may also occur without obvious manifestations, so prevention

measures such as early ambulation and prescribed anticoagulant therapy are important. See the [CDC information on blood clots](#).

#### QUESTION NO: 7

What is the primary nutritional deficiency of concern for a strict vegetarian?

- A. vitamin C
- B. vitamin B12
- C. vitamin E
- D. magnesium

#### ANSWER: B

##### Explanation:

Vitamin B12 is the primary nutritional deficiency concern for a strict vegetarian, particularly for a person following a vegan diet that excludes all animal-derived foods. Naturally occurring, reliable food sources of vitamin B12 are predominantly animal products, including meat, fish, eggs, dairy foods, and shellfish. Vitamin B12 is essential for normal red blood cell formation, neurologic function, and DNA synthesis. Because body stores can last for years, deficiency may develop gradually; however, it can ultimately cause megaloblastic anemia and potentially irreversible neurologic changes if not recognized and treated.

Nursing teaching should emphasize obtaining vitamin B12 through fortified foods, such as certain breakfast cereals, plant milks, and nutritional yeast, or through a reliable oral supplement. The specific supplement dose and monitoring plan should be individualized by a health care provider, especially for people who are pregnant, older adults, or who have gastrointestinal conditions that impair absorption. The National Institutes of Health notes that people consuming little or no animal food may not obtain adequate vitamin B12, and the Academy of Nutrition and Dietetics supports use of fortified foods or supplements for vegans. See the [NIH Vitamin B12 Fact Sheet](#) and the [Academy of Nutrition and Dietetics position on vegetarian diets](#).

#### QUESTION NO: 8

A man reports his wife is constantly cleaning. The activity has interfered with the family life. Friends have stopped visiting because she makes them uncomfortable. He states he has awakened in the middle of the night and found her cleaning.

The nurse should consult with the couple and recommend the husband help with therapy by \_\_\_\_\_.

- A. telling his wife to stop cleaning whenever he notices her actions.
- B. making a baseline record of the time the wife spends cleaning.
- C. decreasing the stimuli in the home.
- D. helping his wife with the cleaning.

#### ANSWER: C

##### Explanation:

**decreasing the stimuli in the home.** is the appropriate recommendation because the described repetitive cleaning, distress, and interference with social and family functioning are consistent with obsessive-compulsive symptoms. Compulsions are repetitive behaviors performed in response to anxiety or intrusive thoughts, often to temporarily reduce distress. A calm, predictable, low-stimulation environment can reduce unnecessary stress and anxiety arousal, supporting the wife's ability to participate in treatment and use healthier coping strategies. Family involvement is important in obsessive-compulsive disorder because relatives can help create a supportive, nonjudgmental setting while the individual receives professional assessment and evidence-based care, such as cognitive behavioral therapy with exposure and response prevention and, when indicated, medication. Environmental support is not a substitute for treatment, but reducing excess stimulation can help limit anxiety-provoking demands in the home and promote therapeutic progress. The National Institute

of Mental Health describes OCD as involving uncontrollable, recurring thoughts and/or behaviors that can significantly affect daily life. More information is available from the [National Institute of Mental Health](#) and the [NICE guideline on obsessive-compulsive disorder](#).

#### QUESTION NO: 9

A Roman Catholic client is preparing to have magnetic resonance imaging. He wants to wear his metal crucifix pendant while he is receiving the test.

Which of the following is an appropriate response by the nurse?

- A. "Because it gives you comfort, you may wear it."
- B. "It is a violation of religious rights to forbid it."
- C. "I am sorry, but it is not safe for you to wear the crucifix during this test."
- D. "You may wear it because it is important to you."

#### ANSWER: C

##### Explanation:

"I am sorry, but it is not safe for you to wear the crucifix during this test." is the appropriate response because MRI uses a powerful magnetic field that can attract or move ferromagnetic metal objects. A metal pendant can therefore become a projectile hazard, potentially causing injury to the client or staff. Metal may also heat during imaging or create artifacts that reduce image quality. Before entering the MRI scanner room, clients must be screened for external metal items, including jewelry, and these items must be removed unless the MRI safety team has specifically determined that they are safe or conditional for that environment.

The nurse should communicate this safety requirement respectfully and recognize the pendant's spiritual significance. The client can be offered a safe alternative, such as securing the crucifix with their belongings and returning it immediately after the scan, or arranging spiritual support in a manner compatible with MRI safety procedures. This approach protects the client while honoring religious values and promoting culturally sensitive care. The American College of Radiology outlines MRI screening and safety practices at [ACR MR Safety](#). Additional patient MRI safety information is available from the U.S. Food and Drug Administration at [FDA MRI Safety](#).

#### QUESTION NO: 10

Which disease decreases the metabolic rate?

- A. Cancer
- B. Hypothyroidism
- C. Chronic obstructive pulmonary disease
- D. Cardiac failure

#### ANSWER: B

##### Explanation:

Hypothyroidism decreases metabolic rate because thyroid hormones—primarily thyroxine (T4) and triiodothyronine (T3)—normally regulate basal metabolic activity in nearly all body tissues. When thyroid hormone production is insufficient, cellular oxygen consumption and energy expenditure decline. This reduced metabolic demand can manifest clinically as fatigue, cold intolerance, weight gain despite no major increase in food intake, bradycardia, constipation, and dry skin. For practical nursing care, recognizing the lower metabolic demand associated with hypothyroidism supports appropriate assessment of nutrition, bowel function, activity tolerance, temperature regulation, and cardiovascular status. The National Institute of Diabetes and Digestive and Kidney Diseases notes that hypothyroidism occurs when the thyroid does not produce enough hormone, causing body processes to slow down. MedlinePlus similarly identifies fatigue, weight gain, and intolerance to cold

among common features, consistent with a reduced basal metabolic rate. Therefore, **Hypothyroidism** is the disease that decreases metabolic rate. [NIDDK: Hypothyroidism](#) [MedlinePlus: Hypothyroidism](#)

#### QUESTION NO: 11

Mr.

H. is upset regarding being in the hospital for another day because he states it costs too much.

The rights he is likely to demand include all of the following except \_\_\_\_\_.

- A. the right to examine and question the bill
- B. the right to reasonable response to requests
- C. the right to refuse treatment
- D. the right to confidentiality

E. is upset regarding being in the hospital for another day because he states it costs too much.  
The rights he is likely to demand include all of the following except \_\_\_\_\_.

#### ANSWER: D

##### Explanation:

**the right to confidentiality** is the correct exception because Mr. H.'s stated concern is the financial burden of an additional hospital day. Nothing in the scenario indicates that his personal health information has been disclosed improperly, that his privacy has been compromised, or that he is seeking limits on the use or sharing of his medical information. Confidentiality remains an important patient right throughout care, but it is not the right most directly connected to his expressed concern in this situation.

Patient confidentiality requires hospitals and health professionals to protect identifiable health information and disclose it only as permitted or required. Federal hospital patient-rights requirements also require protection of each patient's privacy and confidentiality of clinical records. These protections apply regardless of a patient's financial status or length of stay; however, the scenario provides no cue that would lead Mr. H. to demand confidentiality. The relevant context is his concern about the cost and continuation of hospitalization, rather than privacy of information. See the CMS hospital patient-rights regulation at [42 CFR § 482.13](#) and HHS guidance on health-information privacy at [HHS HIPAA Privacy Rule](#).

#### QUESTION NO: 12

A client is having problems with her ankles.

To assess her ankles' ROM, which ROM exercises should the nurse have her perform?

- A. flexion, extension, hyperextension
- B. flexion, extension, abduction, adduction
- C. external rotation, internal rotation
- D. extension, flexion, inversion, eversion

#### ANSWER: D

##### Explanation:

"extension, flexion, inversion, eversion

" is correct because a complete ankle range-of-motion assessment includes movement in the sagittal plane and side-to-side movement of the foot. The client should move the foot upward toward the shin (dorsiflexion, often described as flexion at the



ankle) and downward away from the shin (plantar flexion, often described as extension). The client should also turn the sole inward (inversion) and outward (eversion). Assessing these movements allows the nurse to compare both ankles, identify pain, stiffness, asymmetry, weakness, crepitus, or restricted movement, and document the client's functional joint mobility. Active ROM is generally assessed by asking the client to perform each movement independently when able; the nurse may then assess passive movement if clinically indicated and within the nurse's scope and facility procedure. Standard musculoskeletal examination references identify dorsiflexion, plantar flexion, inversion, and eversion as the relevant motions for evaluating ankle and foot mobility. See the [NCBI StatPearls overview of ankle examination](#) and [MedlinePlus information on range-of-motion exercises](#).

### QUESTION NO: 13

Which of the following are necessary elements of malpractice? (Choose all that apply.)

- A. A breach of duty
- B. An intentional act
- C. A nonintentional act
- D. Foreseeability
- E. Patient harm
- F. Causation

**ANSWER: A D E F**

#### Explanation:

Malpractice is professional negligence, and its legal analysis requires proof that a clinician owed a duty of care, failed to meet the applicable professional standard, and that this failure caused an injury. "A breach of duty" is therefore essential because it identifies conduct that departed from the required standard of care. "Foreseeability" supports proximate cause: the injury must be a reasonably predictable consequence of the breach. "Causation" requires a direct, legally sufficient connection between the breach and the patient's injury rather than merely showing that an adverse outcome occurred. "Patient harm" establishes the damages or injury component; a negligence claim requires an actual compensable injury. Together, these elements establish that the professional failure—not simply the existence of a poor outcome—resulted in harm to the patient. In nursing practice, documenting assessment findings, interventions, communications, and the patient response helps demonstrate compliance with the standard of care and supports evaluation of these elements. The National Council of State Boards of Nursing discusses professional accountability and the nurse's duty to provide safe, competent care in its [National Guidelines for Nursing Delegation](#). The legal framework for professional negligence is also summarized by the [Legal Information Institute's medical malpractice overview](#).

### QUESTION NO: 14

Alcohol, caffeine, or drugs are high risk factors that all fall under which broad classification of risk factors?

- A. Social demographic
- B. Environmental
- C. Biophysical
- D. Psychosocial

**ANSWER: D**

#### Explanation:

Psychosocial is the correct classification because this category includes health-related behaviors, lifestyle practices, coping patterns, and substance use that can affect a person's physical and mental well-being. Alcohol use, excessive caffeine intake, and use of illicit or nonprescribed drugs are modifiable behavioral exposures. Their health effects are influenced not

only by the substance itself, but also by psychological factors, social context, stress, coping strategies, peer influences, and access to support. In nursing assessment and health-promotion planning, identifying these behaviors as psychosocial risk factors helps the nurse assess readiness for change, screen for harmful use, provide nonjudgmental education, and connect the client with appropriate treatment or community resources.

Substance use is associated with substantial preventable harm and may contribute to injury, impaired judgment, sleep disruption, cardiovascular effects, dependence, and difficulties managing existing health conditions. The Centers for Disease Control and Prevention identifies excessive alcohol use as a major preventable public-health concern, while the National Institute on Drug Abuse describes the broad health impact of drug misuse and addiction. These sources support addressing alcohol and drug use through behavioral and psychosocial assessment. See the [CDC overview of alcohol use](#) and the [National Institute on Drug Abuse overview of drugs, the brain, and health](#).

#### QUESTION NO: 15

The family carries out its health care functions in which of the following ways?

- A. Family provides very little preventive health care to its members at home.
- B. Family provides sick care to its members.
- C. Family pays for most health services.
- D. Family decides when and where to hospitalize its members.

#### ANSWER: B

##### Explanation:

Family provides sick care to its members. A central family health-care function is caring for a member who is ill, injured, disabled, or recovering. This care commonly includes observing symptoms, providing comfort and basic physical care, helping with hygiene, nutrition, mobility, and prescribed treatments, and arranging or supporting follow-up with health professionals. Families also provide emotional reassurance and practical assistance that can help the person participate in treatment and recover safely in the home environment. In nursing assessment, the practical care a family can provide during illness is an important part of evaluating family functioning, available supports, and discharge needs. The nurse should assess both the family's willingness and its ability to perform caregiving tasks, teach needed skills in clear language, and connect the family with community resources when care needs exceed what can safely be managed at home. The Centers for Disease Control and Prevention recognizes family caregivers as people who provide ongoing assistance to relatives or friends with health needs, while the National Institute on Aging describes family caregiving as help with daily activities and health-related tasks. See [CDC: Caregiving](#) and [National Institute on Aging: Caregiving](#).

#### QUESTION NO: 16

Which procedures necessitate the use of surgical asepsis techniques? (Choose all that apply.)

- A. Intramuscular medication administration.
- B. Central line intravenous medication administration.
- C. Donning sterile gloves in the operating room.
- D. Neonatal bathing.
- E. Foley catheter insertion.
- F. Emptying a urinary drainage bag.

#### ANSWER: B C E

##### Explanation:

Surgical asepsis, also called sterile technique, is used for procedures that enter normally sterile body sites or involve invasive devices with a direct route to the bloodstream or urinary tract. Central line intravenous medication administration requires meticulous aseptic technique when accessing the catheter hub to prevent contamination and reduce the risk of central line-associated bloodstream infection. The Centers for Disease Control and Prevention recommends aseptic technique and appropriate hub disinfection for intravascular catheter access. Donning sterile gloves in the operating room is part of establishing and maintaining the sterile field required for invasive surgical procedures. Foley catheter insertion also requires sterile equipment and sterile technique because the catheter is introduced through the urethra into the bladder; this practice helps prevent catheter-associated urinary tract infection. These actions maintain a sterile barrier, limit transmission of microorganisms to vulnerable internal sites, and protect the patient from healthcare-associated infection. See the CDC guidance on [prevention of intravascular catheter-related infections](#) and [prevention of catheter-associated urinary tract infections](#).

#### QUESTION NO: 17

The PN is caring for an American-Indian male. While explaining an upcoming procedure, the patient stares at the floor.

Which of these is the most accurate assumption concerning this patient behavior?

- A. The patient is being respectful of the nurse.
- B. The patient needs a nurse of a different gender to explain the procedure.
- C. The patient is showing that they do not consent to the procedure.
- D. The patient is not paying attention.

#### ANSWER: A

##### Explanation:

The patient is being respectful of the nurse. In some American Indian and Alaska Native cultural traditions, avoiding direct eye contact with an authority figure, elder, or health care professional can communicate respect, attentiveness, and deference rather than disengagement. Therefore, looking at the floor while the procedure is explained may be a culturally meaningful nonverbal behavior. The practical nurse should continue to provide the explanation in a calm, respectful manner and use a culturally humble approach to confirm the patient's understanding and preferences. Cultural knowledge should guide curiosity rather than replace individualized assessment; the nurse can invite questions and ask the patient how they prefer information to be communicated. This supports respectful, patient-centered care while recognizing that communication practices vary among individuals, families, and tribal communities. The Indian Health Service emphasizes the importance of culturally appropriate care for American Indian and Alaska Native patients, and the National CLAS Standards promote respectful communication that responds to each person's cultural health beliefs and communication needs. See the [Indian Health Service](#) and the [National CLAS Standards](#).

#### QUESTION NO: 18

A patient 3 hours post-op from a hysterectomy is complaining of intense pain at the incision site. When assessing the patient the nurse notes a BP of 169/93, pulse 145 bpm and regular.

What action should the nurse take?

- A. Reassure patient that pain is normal following surgery.
- B. Administer prn Nifedipine and assess client's response.
- C. Administer prn Meperidine HCL and assess client's response.
- D. Recheck BP and pulse rate every 20 minutes for the next hour.

#### ANSWER: C

##### Explanation:

Administer prn Meperidine HCL and assess client's response is correct because the patient reports intense acute postoperative incisional pain and has physiologic findings consistent with an acute sympathetic response to pain, including marked tachycardia and elevated blood pressure. The priority is to treat the identified cause while continuing focused assessment. A prescribed PRN opioid analgesic is appropriate for severe postoperative pain when the nurse verifies the order, completes required preadministration checks, and evaluates pain intensity, respiratory status, sedation level, oxygenation, blood pressure, and pulse before and after administration. Reassessment is essential to determine whether pain and associated vital-sign elevations improve and to identify adverse opioid effects promptly. Pain management is an important component of safe postoperative nursing care; untreated acute pain can impair mobility, breathing, rest, and recovery. The Joint Commission identifies assessment, treatment, and reassessment of pain as central elements of pain-management practice. The American Society of Anesthesiologists also supports individualized multimodal postoperative analgesia, with opioids used when clinically indicated for more severe pain. See [The Joint Commission pain assessment and management guidance](#) and [ASA acute pain management guidelines](#).

#### QUESTION NO: 19

On a Thursday, the PN is caring for an inpatient who identifies as a Seventh Day Adventist. The patient is scheduled for a minor invasive procedure on Saturday.

Which of these is the most appropriate action?

- A. Ask the patient if he has any specific beliefs or restrictions on the Sabbath.
- B. Move forward with the procedure without question.
- C. Reschedule the procedure for Friday.
- D. Reschedule the procedure for Sunday.

#### ANSWER: A

##### Explanation:

Ask the patient if he has any specific beliefs or restrictions on the Sabbath. is the most appropriate action because culturally and spiritually responsive nursing begins with an individualized assessment rather than making assumptions based on a patient's stated religious affiliation. Many Seventh-day Adventists observe the Sabbath from sunset Friday to sunset Saturday, and some may choose to avoid nonurgent activities, including elective procedures, during that time. However, the extent and meaning of Sabbath observance are personal; the patient is the authority on how their beliefs affect health care decisions. The PN should respectfully ask about preferences, determine whether the planned procedure conflicts with the patient's observance, and communicate relevant information to the RN and health care team so that informed, patient-centered planning can occur. This approach supports the patient's autonomy, religious freedom, and right to participate in decisions about care while also allowing the team to consider the clinical urgency of the procedure. The ANA emphasizes respect for the dignity, values, and beliefs of every person in nursing care. Guidance on providing culturally and religiously responsive care is available from the [American Nurses Association Code of Ethics](#) and the [Joint Commission](#).

#### QUESTION NO: 20

Which type of dressing is recommended to place over a site when a chest tube is removed by the physician?

- A. transparent dressing
- B. colloidal dressing
- C. petrolatum gauze
- D. nonadherent dressing

#### ANSWER: C

##### Explanation:



Petrolatum gauze is the recommended dressing because it helps create an occlusive, airtight seal over the chest-tube insertion site immediately after tube removal. Until the small tract through the chest wall closes, air could potentially enter through the site during inspiration. Covering the site with petrolatum gauze and a sterile occlusive dressing, commonly secured firmly with tape, reduces this risk and supports safe healing. Depending on the facility's policy and the clinician's order, the dressing may be applied while the patient performs a Valsalva maneuver or exhales, which further helps limit air entry at the moment of removal. The nurse should also monitor afterward for respiratory distress, decreased breath sounds, oxygen desaturation, or other findings that may indicate a recurrent pneumothorax. This practice is consistent with clinical procedural guidance for chest-drain removal, which describes promptly applying a petroleum-based occlusive dressing after the drain is withdrawn. See the [NCBI StatPearls review of chest tube care](#) and the [Merck Manual procedural guidance for tube thoracostomy](#).

#### QUESTION NO: 21

Which of the following instructions should the nurse give a client who will be undergoing mammography?

- A. Be sure to use underarm deodorant.
- B. Do not use underarm deodorant.
- C. Do not eat or drink after midnight.
- D. Have a friend drive you home.

**ANSWER: B**

#### Explanation:

"Do not use underarm deodorant" is the appropriate instruction because many deodorants, antiperspirants, powders, lotions, and perfumes contain metallic compounds such as aluminum. When present on the skin of the underarm or breast area, these substances can appear as small bright spots on a mammogram. This may create artifacts that interfere with clear interpretation of the breast images and could require additional imaging. The client should arrive with clean, dry skin in the breast and axillary areas and should avoid applying these products on the day of the examination. Mammography is an x-ray examination of the breast; routine preparation generally does not require fasting, fluid restrictions, sedation, or transportation assistance. The nurse can also prepare the client by explaining that breast compression is necessary to obtain high-quality images and may cause brief discomfort. Clear preparation instructions help reduce avoidable image artifacts and support an accurate study. The [American Cancer Society's mammogram guidance](#) advises avoiding deodorant and similar products before the test. Similar preparation information is provided by [RadiologyInfo.org](#).

#### QUESTION NO: 22

Ill health, malnutrition, and wasting as a result of chronic disease are all associated with \_\_\_\_\_.

- A. Surgical sepsis
- B. Catabolism
- C. Cachexia
- D. Venous stasis

**ANSWER: C**

#### Explanation:

Cachexia is correct because it is a multifactorial wasting syndrome associated with chronic illnesses such as cancer, chronic heart failure, chronic obstructive pulmonary disease, and chronic kidney disease. It involves ongoing loss of body weight and skeletal muscle, often with loss of fat tissue, reduced appetite, fatigue, weakness, and impaired physical function. The nutritional depletion and systemic inflammatory changes of cachexia can occur even when a person is receiving food, so it is not simply ordinary starvation or poor intake. In nursing practice, recognizing cachexia is important because it signals increased vulnerability to complications, including impaired immune function, reduced mobility, skin breakdown, delayed

wound healing, and decreased tolerance of treatment. Assessment should include unintentional weight loss, appetite and dietary intake, muscle mass and strength, functional status, and the effects of the underlying chronic condition. Care is generally interdisciplinary and focuses on management of the underlying illness, symptom relief, nutrition support when appropriate, and preservation of function. The National Cancer Institute describes cancer cachexia as a condition marked by weakness, fatigue, and loss of muscle and fat in people with cancer or other chronic diseases. Further clinical information is available from [the National Cancer Institute's cachexia definition](#) and [StatPearls: Cachexia](#).

#### QUESTION NO: 23

During a routine health screening, the nurse should talk to the parents of a 1-year-old child about which of the following?

- A. the potential hazards of accidents
- B. appropriate nutrition now that the child has been weaned from breast-feeding
- C. toilet training
- D. how to purchase appropriate shoes now that the child is walking

**ANSWER: A**

#### Explanation:

The potential hazards of accidents is the priority topic for parents of a 1-year-old child because this age brings rapidly increasing mobility, curiosity, and exploration without the judgment or coordination needed to recognize danger. As the child begins walking, climbing, reaching, and placing objects in the mouth, injury-prevention teaching is essential during routine screening. The nurse should discuss close, active supervision; use of properly installed car seats; prevention of falls from stairs, furniture, and windows; keeping medicines, cleaning products, batteries, and other poisons locked away; burn prevention; and protection from choking, drowning, and firearm injury. Counseling should be practical and tailored to the child's current developmental abilities and the family's home environment. The Centers for Disease Control and Prevention identifies unintentional injuries as a major cause of harm to children and emphasizes prevention through safe environments, supervision, and appropriate protective measures. Anticipatory guidance at this visit helps caregivers address predictable safety risks before an injury occurs. See the [CDC child safety guidance](#) and the American Academy of Pediatrics' [home safety recommendations](#) for age-appropriate prevention measures.

#### QUESTION NO: 24

The nurse is caring for a client with a draining wound culture positive for methicillin-resistant *Staphylococcus aureus* (MRSA).

Which infection-control measures should the nurse implement? (Choose all that apply.)

- A. Perform hand hygiene before and after client contact.
- B. Wear a gown and gloves when entering the room.
- C. Use dedicated client-care equipment when possible.
- D. Place the client in a negative-pressure room.
- E. Wear an N95 respirator for routine care.

**ANSWER: A B C**

#### Explanation:

MRSA transmitted through direct or indirect contact requires Contact Precautions in addition to Standard Precautions. The nurse should perform hand hygiene before and after client contact and after removing personal protective equipment. A gown and gloves are worn on room entry when contact with the client or potentially contaminated environmental surfaces is anticipated. Dedicated or disposable client-care equipment, such as a blood pressure cuff or stethoscope, reduces the risk of transferring organisms between clients.

A surgical mask is not routinely required for MRSA wound infection unless another condition or procedure creates an indication for mask use. The Centers for Disease Control and Prevention recommends Contact Precautions for clients infected or colonized with epidemiologically important multidrug-resistant organisms. See the [CDC Isolation Precautions guidance](#).

#### QUESTION NO: 25

Which of the following patients would be least likely to develop hypernatremia?

- A. a patient with chronic renal insufficiency
- B. a patient with diabetes insipidus
- C. a patient with extensive thermal burns
- D. a patient taking anabolic steroids

#### ANSWER: D

##### Explanation:

**a patient taking anabolic steroids** is least likely to develop hypernatremia. Hypernatremia is primarily a disorder of insufficient body water relative to sodium, rather than simply an increase in total body sodium. It most commonly develops when free-water losses are not adequately replaced or when access to water or thirst responses are impaired. Anabolic-androgenic steroids are more characteristically associated with sodium and water retention, which can produce edema or fluid-volume expansion. This pattern does not typically create the disproportionate free-water deficit that defines hypernatremia.

For nursing assessment, serum sodium must be interpreted with the patient's hydration status, intake and output, neurologic findings, weight, and clinical evidence of volume depletion or overload. The Merck Manual notes that hypernatremia generally reflects a deficit of water in relation to body sodium and is often associated with impaired access to water or excessive water loss. Drug labeling for anabolic steroids also identifies fluid and electrolyte retention, including sodium retention, as a potential adverse effect. These principles support selecting the patient taking anabolic steroids as the least likely patient to develop hypernatremia. See [Merck Manual: Hypernatremia](#) and [DailyMed: Oxandrolone labeling](#).

#### QUESTION NO: 26

The nurse is caring for a client who takes lithium carbonate for bipolar disorder.

Which of the following findings should the nurse recognize as possible manifestations of lithium toxicity? (Choose all that apply.)

- A. Coarse hand tremors
- B. Persistent vomiting or diarrhea
- C. Unsteady gait
- D. Confusion
- E. Increased thirst after exercise
- F. Mild dry mouth on awakening

#### ANSWER: A B C D

##### Explanation:

Coarse tremors, vomiting or persistent diarrhea, unsteady gait, and confusion can indicate lithium toxicity. Lithium has a narrow therapeutic range, and toxicity may occur when serum levels rise because of dehydration, sodium loss, renal impairment, or drug interactions. The nurse should withhold the medication and promptly report manifestations of toxicity.

Clients should be taught to maintain consistent fluid and sodium intake and to contact the provider for prolonged vomiting, diarrhea, fever, or excessive sweating. See the [MedlinePlus information on lithium](#).

#### QUESTION NO: 27

Neural tube defects in the fetus have been primarily associated with which deficiency in the mother?

- A. iron
- B. folic acid
- C. vitamin B12
- D. vitamin E

#### ANSWER: B

##### Explanation:

Folic acid is the correct answer because adequate maternal folate status before conception and during early pregnancy is essential for normal formation and closure of the fetal neural tube. The neural tube develops very early—often before a person realizes they are pregnant—so folic acid supplementation is recommended for people who could become pregnant, in addition to obtaining folate from a balanced diet. Insufficient folate during this critical developmental period is associated with neural tube defects, including spina bifida and anencephaly. The U.S. Centers for Disease Control and Prevention advises that women capable of becoming pregnant consume 400 micrograms of folic acid daily to help prevent neural tube defects. For individuals with a prior pregnancy affected by a neural tube defect or other high-risk circumstances, a clinician may recommend a higher dose before conception and during early pregnancy. This preventive recommendation reflects strong public-health evidence that folic acid taken before and in early pregnancy reduces the occurrence of these serious congenital anomalies. See the [CDC overview of folic acid and neural tube defect prevention](#) and the [American College of Obstetricians and Gynecologists guidance on nutrition during pregnancy](#).

#### QUESTION NO: 28

How many feet should separate the nurse and the source when extinguishing a small, wastebasket fire with an appropriate extinguisher?

- A. 1 foot
- B. 2 feet
- C. 4 feet
- D. 6 feet

#### ANSWER: D

##### Explanation:

**6 feet** is correct because a nurse using a portable fire extinguisher on a small wastebasket fire should begin from a safe working distance, generally about 6 to 8 feet away, and then move closer only if necessary as the fire diminishes. This distance allows the extinguishing agent to reach and cover the base of the fire while reducing unnecessary exposure to heat, flames, smoke, and splashing or scattering burning material. The nurse should use the PASS technique: pull the pin, aim the nozzle at the base of the fire, squeeze the handle, and sweep from side to side. Beginning approximately 6 feet from the source supports effective aiming at the fuel source rather than the flames themselves and preserves an escape route if the fire does not respond promptly. In a healthcare setting, staff should attempt to extinguish only a small, contained fire when it is safe to do so, after activating the alarm and ensuring that evacuation procedures are underway. Fire-extinguisher operating guidance commonly directs users to stand several feet back and approach cautiously as needed. See the [Occupational Safety and Health Administration fire-prevention guidance](#) and the [U.S. Fire Administration fire-extinguisher guidance](#).

### QUESTION NO: 29

A client with diabetes mellitus is awake and reports feeling shaky and sweaty.

Which of the following findings are consistent with hypoglycemia? (Choose all that apply.)

- A. Shakiness
- B. Diaphoresis
- C. Tachycardia
- D. Confusion
- E. Warm, dry skin
- F. Increased thirst

**ANSWER: A B C D**

#### Explanation:

Shakiness, diaphoresis, tachycardia, and confusion are common manifestations of hypoglycemia. When blood glucose falls, the body releases counterregulatory hormones such as epinephrine. This can cause adrenergic findings including tremors, sweating, palpitations, anxiety, and tachycardia. As glucose availability to the brain decreases, neuroglycopenic manifestations such as confusion, irritability, difficulty concentrating, slurred speech, seizures, or loss of consciousness may occur.

In an alert client who can safely swallow, the nurse should check the blood glucose level and treat confirmed or suspected hypoglycemia promptly with a fast-acting carbohydrate according to the prescribed protocol. The [American Diabetes Association guidance on hypoglycemia](#) describes these manifestations and the need for prompt treatment.

### QUESTION NO: 30

A client receiving drug therapy with furosemide and digitalis requires careful observation and care. In planning care for this client, the nurse should recognize that which of the following electrolyte imbalances is most likely to occur?

- A. hyperkalemia
- B. hypernatremia
- C. hypokalemia
- D. hypomagnesemia

**ANSWER: C**

#### Explanation:

**hypokalemia** is most likely because furosemide is a loop diuretic that inhibits sodium, chloride, and potassium reabsorption in the loop of Henle. The resulting increased urinary output can cause substantial potassium loss, particularly when therapy is ongoing or doses are high. The nurse should plan to monitor serum potassium values, assess for manifestations such as muscle weakness, fatigue, constipation, and dysrhythmias, and administer potassium replacement if prescribed. This risk is especially clinically significant in a client receiving digitalis (digoxin). Low serum potassium increases myocardial sensitivity to digoxin, raising the risk of digoxin toxicity and potentially serious cardiac rhythm disturbances. Care also includes monitoring the apical pulse and cardiac rhythm, reviewing renal function and electrolyte results, and recognizing possible toxicity manifestations, such as nausea, vomiting, visual changes, or new dysrhythmias. Furosemide prescribing information specifically identifies hypokalemia as a potential effect and recommends observation for electrolyte imbalance. Digoxin labeling similarly notes that hypokalemia increases the risk of toxicity. See the [FDA furosemide label](#) and the [FDA digoxin label](#).



### QUESTION NO: 31

Which of the following arterial blood gas values indicates a patient may be experiencing a condition of metabolic acidosis?

- A. PaO<sub>2</sub> (90%)
- B. Bicarbonate 15 mEq/L
- C. CO<sub>2</sub> 47 mm Hg
- D. pH 7.34

**ANSWER: B**

#### Explanation:

Bicarbonate 15 mEq/L indicates metabolic acidosis because serum bicarbonate ( $\text{HCO}_3^-$ ) is the principal metabolic component used to assess acid-base balance. In metabolic acidosis, either excess acid accumulates or the body loses bicarbonate; both processes lower the bicarbonate concentration. A typical bicarbonate reference range is approximately 22–28 mEq/L, so a value of 15 mEq/L is distinctly decreased and supports a metabolic cause of acidemia. This finding should be interpreted with the patient's pH, PaCO<sub>2</sub>, clinical presentation, electrolyte values, anion gap, and possible compensatory respiratory response. For example, the lungs may compensate by increasing ventilation to lower PaCO<sub>2</sub>, but that compensation does not change the primary metabolic finding of reduced bicarbonate. Common clinical settings include diabetic ketoacidosis, lactic acidosis, renal failure, severe diarrhea, and certain toxin exposures. Prompt recognition is important because management focuses on identifying and treating the underlying cause while monitoring respiratory status, perfusion, electrolytes, and cardiac rhythm. See the [Merck Manual's overview of metabolic acidosis](#) and [MedlinePlus information on bicarbonate testing](#).

### QUESTION NO: 32

Which of the following methods of contraception is able to reduce the transmission of HIV and other STDs?

- A. intrauterine device (IUD)
- B. Norplant
- C. oral contraceptives
- D. vaginal sponge
- E. External condoms (male condoms) used correctly and consistently

**ANSWER: E**

#### Explanation:

**External condoms (male condoms) used correctly and consistently** are the contraceptive method that reduces transmission of HIV and other sexually transmitted infections while also reducing pregnancy risk. Condoms function as a physical barrier that limits exposure to potentially infectious genital secretions during vaginal, anal, or oral sex. Their protective benefit depends on consistent use for every act of sex and correct use from start to finish; a new condom should be used for each act of intercourse. The Centers for Disease Control and Prevention states that consistent and correct use of latex condoms is highly effective in preventing sexual transmission of HIV, and condoms also reduce the risk for many other STIs. For people with latex allergy, non-latex synthetic condoms can be used; natural membrane condoms should not be relied upon for HIV or STI prevention. Counseling should also include STI testing as indicated, mutual monogamy with a partner known to be uninfected, and HIV pre-exposure prophylaxis when a person has substantial HIV exposure risk. See the [CDC information on condoms](#) and the [CDC guidance on condoms and HIV prevention](#).

### QUESTION NO: 33

Which of the following healthcare providers can legally have access to all, or part, of a patient's medical record because they have a "need to know"?

(Choose all that apply.)

- A. Student nurses caring for a particular patient.
- B. Registered nurses when they are not caring for a particular patient.
- C. The Vice President for Nursing who is investigating a patient fall.
- D. Licensed practical nurses caring for a particular patient.
- E. A quality assurance nurse collecting data for a performance improvement activity.

**ANSWER: A C D E**

**Explanation:**

Student nurses caring for a particular patient, licensed practical nurses caring for a particular patient, the Vice President for Nursing who is investigating a patient fall, and a quality assurance nurse collecting data for a performance improvement activity each have a legitimate work-related need to access the portion of the medical record necessary for their assigned responsibilities. Under the HIPAA Privacy Rule, a health care provider may use protected health information for treatment, and a covered entity may use it for health care operations, including quality assessment and improvement activities and investigation of patient-safety events. Student nurses participating in the patient's care may access needed information as members of the provider's workforce or training program, subject to organizational policy, supervision, and role-based access controls. Direct-care nurses need relevant record information to safely assess, plan, provide, document, and evaluate care. Nursing leadership investigating a fall and quality personnel conducting performance-improvement work may access information needed to evaluate the event, identify risks, and improve care processes. Access is not unlimited: each person should view only the information reasonably necessary for the authorized treatment or operational purpose, consistent with facility policy and applicable law. See the U.S. Department of Health and Human Services' [HIPAA Privacy Rule guidance](#) and the federal regulation on uses and disclosures for treatment, payment, and health care operations at [45 CFR § 164.506](#).

**QUESTION NO: 34**

An LPN student nurse is assigned to shadow you for the day. When she learns one of the patients you are caring for has Hepatitis C, she states, "I might find another nurse to shadow. I really don't feel comfortable caring for anyone with Hepatitis C." What is your best response?

- A. "As a nurse, you will take care of patients with many types of illnesses. I think it's best you stay with me."
- B. "Don't worry. I've taken care of this guy many times. He's super nice and pretty independent, so you won't have any physical contact with him."
- C. "Why are you so afraid of Hepatitis C? If you take proper precautions, you will not get it."
- D. "What do you know about Hepatitis C?"

**ANSWER: D**

**Explanation:**

"What do you know about Hepatitis C?" is the best response because it uses a therapeutic, nonjudgmental assessment approach before providing teaching or direction. The student's statement may reflect an inaccurate understanding of how hepatitis C virus is transmitted, concern about occupational exposure, or a need for support in applying infection-prevention practices. Asking what the student knows identifies her specific knowledge gap and opens a respectful conversation without shaming her or reinforcing stigma toward the patient.

Hepatitis C is a bloodborne infection. In clinical care, transmission prevention depends on consistently following Standard Precautions, including hand hygiene, appropriate use of personal protective equipment when exposure to blood or body fluids is anticipated, safe injection practices, and sharps safety. These measures are used for every patient, regardless of known diagnosis, because infection status may not be known. After assessing the student's understanding, the nurse can provide accurate education, review unit policies, and help the student participate safely in care while protecting the patient's

dignity and right to nondiscriminatory treatment. The CDC provides guidance on hepatitis C transmission and prevention at [CDC: Hepatitis C](#) and on Standard Precautions at [CDC: Standard Precautions](#).

#### QUESTION NO: 35

A nursing care plan for a client with sleep problems has been implemented.

All of the following should be expected outcomes except \_\_\_\_\_.

- A. the client reports no episodes of awakening during the night
- B. the client falls asleep within 1 hour of going to bed
- C. the client reports satisfaction with his amount of sleep
- D. the client rates sleep as an 8 or more on the visual analog scale

**ANSWER: A**

#### Explanation:

The client reports no episodes of awakening during the night is not an appropriate expected outcome because it establishes an absolute, physiologically unrealistic sleep goal. Normal sleep consists of repeating cycles, and brief arousals or awakenings can occur between cycles without necessarily impairing restorative sleep or indicating that the nursing plan has failed. A client may also awaken briefly and return to sleep without recalling the event. Expected outcomes for sleep interventions should be individualized, realistic, measurable, and focused on improved sleep quality, adequate duration, reduced sleep-onset difficulty, and the client's perception of feeling rested. For example, a plan may target fewer disruptive awakenings, the ability to return to sleep after awakening, or improved satisfaction with sleep. These outcomes acknowledge normal sleep physiology while still allowing the nurse and client to evaluate whether interventions are improving the identified sleep problem. The National Institute of Neurological Disorders and Stroke describes sleep as a cycle through distinct stages that repeats throughout the night, supporting the expectation that sleep is not a single uninterrupted state. See the [National Institute of Neurological Disorders and Stroke overview of sleep](#) and the [NCBI overview of normal sleep physiology](#).

#### QUESTION NO: 36

The nurse is caring for a client with suspected pulmonary tuberculosis.

Which infection-control measures should the nurse implement? (Choose all that apply.)

- A. Place the client in a negative-pressure room.
- B. Wear a fit-tested N95 respirator when entering the room.
- C. Keep the room door closed.
- D. Place a surgical mask on the client during transport.
- E. Use a sterile gown for all care.
- F. Place the client in a room with another client who has pneumonia.

**ANSWER: A B C D**

#### Explanation:

Pulmonary tuberculosis requires airborne precautions because infectious droplet nuclei can remain suspended in the air and be inhaled by others. The client should be placed in an airborne infection isolation room with negative air pressure, and health care personnel should wear a fit-tested N95 respirator or higher-level respirator when entering the room. The room door should remain closed except for necessary entry and exit. A surgical mask is placed on the client when transport outside the room is necessary. See the [CDC tuberculosis infection-control guidance](#).

### QUESTION NO: 37

While undergoing fetal heart monitoring, a pregnant Native-American woman requests that a medicine woman be present in the examination room.

Which of the following is an appropriate response by the nurse?

- A. "I will assist you in arranging to have a medicine woman present."
- B. "We do not allow medicine women in exam rooms."
- C. "That does not make any difference in the outcome."
- D. "It is old-fashioned to believe in that."

### ANSWER: A

#### Explanation:

"I will assist you in arranging to have a medicine woman present." is correct because it acknowledges the client's expressed cultural and spiritual preference and communicates a willingness to partner with her in her care. Culturally responsive nursing requires asking about and respecting the values, beliefs, practices, and support persons that are meaningful to each individual client. For this client, the presence of a medicine woman may provide spiritual support, reassurance, and a sense of safety during pregnancy assessment. The nurse should facilitate this request within applicable facility procedures, including privacy, infection-prevention, safety, and consent requirements. This approach demonstrates cultural humility: the nurse does not assume what the practice means or its importance, but instead recognizes the client as the authority on her own beliefs and care preferences. Respectful accommodation can strengthen therapeutic communication and support patient-centered maternity care. The U.S. Department of Health and Human Services' National CLAS Standards emphasize providing respectful care that is responsive to diverse cultural health beliefs and practices. The American Nurses Association also identifies respect for each person's inherent dignity as a foundational ethical duty. See [HHS National CLAS Standards](#) and [American Nurses Association Code of Ethics](#).

### QUESTION NO: 38

The 24-hour day-night cycle is known as \_\_\_\_\_.

- A. circadian rhythm
- B. infradian rhythm
- C. ultradian rhythm
- D. non-REM rhythm

### ANSWER: A

#### Explanation:

The correct term is **circadian rhythm**. A circadian rhythm is an endogenous biological pattern that runs on an approximately 24-hour cycle and is synchronized with environmental cues, particularly the light-dark cycle. In humans, the suprachiasmatic nucleus in the hypothalamus functions as the central circadian clock. It helps coordinate sleep and wakefulness, daily variations in alertness, body temperature, hormone secretion, metabolism, and other physiologic processes. Exposure to daylight helps reinforce alignment of this internal timing system with the external day-night schedule. For nursing practice, circadian timing is relevant when assessing sleep patterns and when caring for patients whose sleep-wake cycles may be disrupted by illness, hospitalization, shift work, medications, or environmental factors. The National Institute of General Medical Sciences describes circadian rhythms as physical, mental, and behavioral changes that follow a 24-hour cycle, while the National Institute of Neurological Disorders and Stroke identifies the brain's circadian clock as a key regulator of sleep-wake timing. [National Institute of General Medical Sciences: Circadian Rhythms](#); [National Institute of Neurological Disorders and Stroke: Circadian Rhythm Sleep-Wake Disorders](#).

### QUESTION NO: 39

In an obstetrical emergency, which of the following actions should the nurse perform *first* after the baby delivers?

- A. Place extra padding under the mother to absorb blood from the delivery.
- B. Cut the umbilical cord using sterile scissors.
- C. Suction the baby's mouth and nose.
- D. Wrap the baby in a clean blanket to preserve warmth.

**ANSWER: D**

#### Explanation:

"Wrap the baby in a clean blanket to preserve warmth." is the priority action among the listed interventions because preventing neonatal heat loss is an immediate component of essential newborn care. A newly delivered infant loses heat rapidly through evaporation, conduction, convection, and radiation. Hypothermia raises oxygen consumption and glucose use, which can compromise the infant's transition to extrauterine life. The nurse should promptly provide warmth while simultaneously observing the newborn's breathing, tone, and color. In an emergency birth, wrapping the infant in a clean, dry blanket is an appropriate immediate measure when more comprehensive warming equipment is not available. Current neonatal resuscitation guidance emphasizes providing warmth, drying, positioning, and stimulation during the initial steps of newborn care; these steps support effective cardiopulmonary transition and allow rapid recognition of an infant who needs further intervention. This priority aligns with the NCLEX-PN focus on safe, timely nursing actions in maternal-newborn emergencies. See the American Heart Association's [Neonatal Resuscitation guidance](#) and the NCSBN [NCLEX-PN Test Plan](#).

### QUESTION NO: 40

The nurse is caring for a client with heart failure who is receiving diuretic therapy.

Which findings should the nurse report to the health care provider? (Choose all that apply.)

- A. Weight gain of 3 lb in 2 days
- B. Increasing dyspnea at rest
- C. New bilateral crackles
- D. Urine output of 20 mL/hr for 2 consecutive hours
- E. Heart rate of 76 beats/minute
- F. Blood pressure of 118/70 mm Hg

**ANSWER: A B C D**

#### Explanation:

A weight gain of 3 lb in 2 days, increasing dyspnea at rest, and new bilateral crackles may indicate worsening fluid retention and pulmonary congestion in a client with heart failure. Daily weight is a sensitive indicator of fluid balance because a rapid increase commonly reflects retained fluid rather than increased body tissue. Worsening shortness of breath and crackles can occur when fluid accumulates in the lungs and require prompt evaluation.

Decreased urine output may also indicate reduced renal perfusion, worsening heart failure, or an inadequate response to diuretic therapy. The nurse should report these findings promptly and continue to assess respiratory status, oxygen saturation, edema, intake and output, and response to prescribed treatment. The [American Heart Association warning signs of heart failure](#) includes rapid weight gain and worsening dyspnea as symptoms requiring clinical attention.

#### QUESTION NO: 41

The nurse teaching about preventable diseases should emphasize the importance of getting the following vaccines \_\_\_\_\_.

- A. human papilloma virus, genital herpes, measles
- B. pneumonia, HIV, mumps
- C. syphilis, gonorrhea, pneumonia
- D. polio, pertussis, measles

**ANSWER: D**

#### Explanation:

Polio, pertussis, and measles are vaccine-preventable communicable diseases for which routine immunization remains essential. Although vaccination programs have dramatically reduced their occurrence in the United States and many other countries, these infections have not been eradicated worldwide. Continued vaccination protects the individual and supports community protection by reducing opportunities for transmission, particularly to infants, immunocompromised people, and others who cannot receive every vaccine.

Polio vaccination prevents paralytic poliomyelitis, a potentially permanent neurologic illness. Pertussis vaccination is especially important because severe disease can occur in young infants; protection is maintained through recommended childhood doses and later booster vaccination. Measles vaccination is vital because measles is highly contagious and can cause serious complications, including pneumonia and encephalitis. Teaching should reinforce adherence to the age-appropriate routine immunization schedule and encourage caregivers to keep vaccination records current. The Centers for Disease Control and Prevention provides current routine immunization schedules and disease-specific information for clinicians and families at [CDC Immunization Schedules](#) and [CDC Measles Information](#).

#### QUESTION NO: 42

A child comes to the clinic with a skin rash. The maculopapular lesions are distributed around the mouth and have honey-colored drainage. The caregiver states that the rash is getting worse and seems to spread with the child's scratching.

Which of the following advisory comments should be given?

- A. The history and presentation might indicate chickenpox, a highly contagious disease.
- B. The lesions might indicate a noncontagious infection that does not require isolation.
- C. The history and presentation might indicate an infectious illness called impetigo.
- D. The lesions are not contagious unless others have open wounds or lesions themselves.

**ANSWER: C**

#### Explanation:

The history and presentation might indicate an infectious illness called impetigo. Impetigo is a superficial bacterial skin infection, most often caused by *Staphylococcus aureus* or group A *Streptococcus*. It is especially common in children and is characteristically associated with lesions that rupture and form a golden- or honey-colored crust, frequently on the face around the nose and mouth. Scratching can spread bacteria from one area of skin to another, which accounts for the caregiver's observation that the rash is worsening and spreading.

The child's caregiver should be advised that impetigo is contagious through direct contact with the drainage or contaminated items such as towels, clothing, bedding, and toys. Appropriate clinical evaluation and prescribed topical or oral antibiotic treatment are important. Infection-control teaching includes hand hygiene, keeping lesions clean and covered when feasible, avoiding scratching, trimming the child's nails, and not sharing personal items. With effective antibiotic therapy, children are generally considered less likely to transmit infection after treatment has begun; local school or child-care policies may guide



return. The Centers for Disease Control and Prevention provides clinical information on group A streptococcal impetigo at [CDC: Clinical Guidance for Impetigo](#). Additional pediatric guidance is available from [HealthyChildren.org: Impetigo](#).

#### QUESTION NO: 43

A client is taking the fluoroquinolone Ciprofloxacin for acute prostatitis. After a few doses of the agent, he develops severe muscle pain.

The most likely cause of the adverse reaction is \_\_\_\_\_.

- A. electrolyte imbalance
- B. impending tendon rupture
- C. calcium deposits
- D. antibiotic-associated colitis

#### ANSWER: B

##### Explanation:

“impending tendon rupture” is correct because ciprofloxacin is a fluoroquinolone, a drug class with a well-established risk of tendinitis and tendon rupture. New severe pain involving a muscle or, more specifically, tissue near a tendon should raise concern for fluoroquinolone-associated tendon injury. Symptoms can begin soon after therapy is started, including after only a few doses, and may occur during treatment or continue after the medication is discontinued. The Achilles tendon is commonly involved, but injury can affect other tendons, including those in the shoulder, hand, thumb, or upper arm.

The appropriate nursing response is to treat this symptom as clinically significant: the client should stop exercise or use of the painful area, promptly contact the prescriber, and be evaluated for tendinopathy or rupture. Continuing activity despite tendon pain can increase the risk of a complete rupture and functional impairment. Risk is especially important in older adults, people receiving corticosteroids, and transplant recipients, although tendon injury can occur in any client receiving a fluoroquinolone. The United States Food and Drug Administration includes tendon injury among the serious adverse effects requiring prompt attention. See the [FDA fluoroquinolone safety communication](#) and [MedlinePlus ciprofloxacin information](#).

#### QUESTION NO: 44

Which of the following is not a reason for pelvic ultrasonography?

- A. to measure uterine size
- B. to detect multiple pregnancies
- C. to measure renal size
- D. to detect foreign bodies

#### ANSWER: C

##### Explanation:

“to measure renal size” is correct because assessing kidney dimensions is performed with a renal ultrasound examination, not a pelvic ultrasound. Renal ultrasonography is directed at the kidneys and surrounding retroperitoneal structures and is used to evaluate renal size, anatomy, obstruction, stones, cysts, and other renal abnormalities. The scanning approach and required images focus on the upper urinary tract, typically through the abdomen or flank, rather than the pelvic organs.

In contrast, pelvic ultrasonography is designed to visualize pelvic structures, such as the uterus, ovaries, fallopian-tube region, bladder, and, during pregnancy, the gestational sac and fetus. Its clinical purpose includes evaluating uterine size and pregnancy-related findings. Therefore, when the question asks for a purpose that is *not* a reason for pelvic ultrasonography, measuring renal size is the appropriate selection because it belongs to a separate, kidney-focused ultrasound study. The American College of Radiology describes ultrasound of the retroperitoneum, including the kidneys, as

an examination used to assess renal anatomy and dimensions. See the [American College of Radiology guidance on renal ultrasound imaging](#) and [RadiologyInfo.org's overview of pelvic ultrasound](#).

#### QUESTION NO: 45

Which statement would be the most accurate in safety education for injury prevention in the home of elderly adults?

- A. Use the handrail when going up and down the stairs, ensure robes or pants are held up if flowy, and wear comfortable, non-skid footwear.
- B. Use solid chairs without armrests, remove anything in walkways, and use cordless phones.
- C. Have raised toilet seats, ensure all throw rugs have gripping material on the floor side, and use grab bars in the shower/bathroom.
- D. Remove all throw rugs, remove furniture from all pathways, and wear comfortable, non-skid footwear.

#### ANSWER: D

##### Explanation:

“Remove all throw rugs, remove furniture from all pathways, and wear comfortable, non-skid footwear.” is the most accurate teaching statement because it directly addresses several common, modifiable causes of falls in the home: tripping hazards, obstructed walking routes, and inadequate footwear. Falls are a major cause of injury among older adults, and prevention teaching should focus on making routine movement through the home as safe as possible. Throw rugs can shift, curl at the edges, or slide underfoot; removing them eliminates that hazard rather than relying on an older adult to recognize or correct a loose rug. Keeping pathways free of furniture provides adequate space for walking, turning, and use of an assistive device if needed. Comfortable, properly fitting footwear with non-skid soles improves traction and stability during ambulation. This combination is especially useful because it reduces environmental risks while supporting safer mobility in daily activities. The Centers for Disease Control and Prevention recommends reducing home hazards as part of fall prevention, including removing tripping hazards and improving walking surfaces. See the [CDC's older-adult fall-prevention guidance](#) and its [Check for Safety home checklist](#).

#### QUESTION NO: 46

Which statement about adjuvant medications is true and accurate?

- A. Licensed practical nurses cannot administer adjuvant medications.
- B. Adjuvant medications are schedule 2 narcotics.
- C. Adjuvant medications are schedule 1 narcotics.
- D. Adjuvant medications can be purchased over the counter.

#### ANSWER: D

##### Explanation:

“Adjuvant medications can be purchased over the counter” is accurate because some medications used as adjuvant analgesics are available without a prescription. Adjuvant analgesics are drugs whose primary purpose may be something other than pain relief but that can provide analgesia in particular pain syndromes or enhance an overall pain-management plan. Common examples include nonsteroidal anti-inflammatory drugs and topical analgesic products. Certain products in these categories, such as low-dose ibuprofen, naproxen, acetaminophen, and some topical local-anesthetic preparations, are sold over the counter when used according to their labeled directions.

For the practical nurse, this point is clinically important during medication reconciliation and pain assessment. Clients may self-administer nonprescription pain products and may not identify them as “medications” unless specifically asked. The nurse should assess the product, dose, frequency, indication, therapeutic effect, adverse effects, allergies, and potential duplication with prescribed therapy, then report concerns and reinforce safe use within the plan of care. Availability without a

prescription does not eliminate the need for assessment or monitoring. The National Cancer Institute describes adjuvant analgesics and their role in pain management, and the Food and Drug Administration provides consumer safety information about nonprescription pain medicines: [National Cancer Institute Pain PDQ](#); [FDA: What Is a Nonprescription Medicine?](#).

#### QUESTION NO: 47

James returns home from school angry and upset because his teacher gave him a low grade on an assignment. After returning home from school, he kicks the dog.

This coping mechanism is known as \_\_\_\_\_.

- A. denial
- B. suppression
- C. displacement
- D. fantasy

**ANSWER: C**

#### Explanation:

Displacement is correct because James redirects the anger and frustration he feels toward his teacher after receiving a low grade onto a safer, less threatening target: the dog. In psychodynamic theory, displacement is an unconscious ego defense mechanism in which emotional energy associated with a person or situation that feels difficult to confront directly is transferred to another person, object, or situation. The original source of James's distress is the teacher's evaluation and the low grade, but he does not direct his response toward that source. Instead, he acts out toward the dog, which becomes a convenient substitute target for the emotion. Nurses should recognize defense mechanisms as often unconscious attempts to manage anxiety or distress. Identifying displacement can help the nurse assess the underlying trigger for a client's behavior, maintain safety, and respond therapeutically to the emotion rather than focusing only on the redirected action. The American Psychological Association defines displacement as redirecting an emotion from its original object to another target. See the [APA Dictionary of Psychology definition of displacement](#) and [StatPearls: Defense Mechanisms](#).

#### QUESTION NO: 48

The tendency of a drug to combine with its receptor is called \_\_\_\_\_.

- A. potency
- B. efficacy
- C. kinetics
- D. affinity

**ANSWER: D**

#### Explanation:

Affinity is correct because it describes the tendency and strength with which a drug binds to its specific receptor. Drug-receptor binding is a central pharmacodynamic concept: a drug molecule must generally bind to a receptor, enzyme, ion channel, or other target before it can alter cellular activity and produce a therapeutic or adverse response. A drug with higher affinity binds more readily or tightly to its receptor than a drug with lower affinity under comparable conditions. This property concerns receptor binding itself, not the size of the clinical response that follows binding.

Understanding affinity helps nurses connect pharmacology principles to medication effects. Receptor binding is governed by the relationship between drug concentration and receptor occupancy; as drug concentration rises, more receptors may become occupied until available binding sites approach saturation. However, receptor binding alone does not determine the maximal response, because the response also depends on what the drug does after it occupies the receptor. This distinction

is important when interpreting medication dose-response information and anticipating effects in clinical practice. See the [NCBI Bookshelf review of pharmacodynamics](#) and the [NCBI Bookshelf discussion of drug-receptor interactions](#).

#### QUESTION NO: 49

Which of the following lab values is associated with a decreased risk of cardiovascular disease?

- A. high HDL cholesterol
- B. low HDL cholesterol
- C. low total cholesterol
- D. low triglycerides

#### ANSWER: A

##### Explanation:

High HDL cholesterol is the correct answer. In traditional cardiovascular risk assessment and NCLEX-PN teaching, HDL cholesterol is often called “good” cholesterol because it participates in reverse cholesterol transport: HDL helps carry cholesterol from the bloodstream and tissues back to the liver, where it can be processed and eliminated. Higher HDL levels have historically been associated in population studies with a lower risk of coronary heart disease and other atherosclerotic cardiovascular disease. Therefore, when selecting one laboratory value most classically associated with decreased cardiovascular risk, high HDL cholesterol is the best answer.

HDL should be considered as part of an overall lipid profile and risk assessment rather than interpreted alone. Current prevention practice also considers LDL cholesterol, blood pressure, diabetes status, tobacco use, age, and other clinical factors when estimating a person’s cardiovascular risk. Nevertheless, the established educational association tested in this question is that a higher HDL cholesterol level reflects a more favorable cardiovascular risk pattern. The Centers for Disease Control and Prevention describes HDL as helping remove cholesterol from the blood, and the American Heart Association provides guidance on cholesterol and cardiovascular risk assessment. See [CDC: About Cholesterol](#) and [American Heart Association: About Cholesterol](#).

#### QUESTION NO: 50

A patient has just been prescribed Minipress to control hypertension.

The nurse should instruct the patient to be observant of the following \_\_\_\_\_.

- A. Dizziness and light headed sensations
- B. Weight gain
- C. Sensory changes in the lower extremities
- D. Fatigue

#### ANSWER: A

##### Explanation:

Dizziness and light headed sensations are the key symptoms the patient taking Minipress (prazosin) should monitor and report, particularly when starting therapy or after a dosage increase. Prazosin is an alpha-1 adrenergic blocker that lowers blood pressure through peripheral vasodilation. This effect can produce orthostatic hypotension—a drop in blood pressure when changing position—and, less commonly, syncope (fainting). The product labeling specifically warns about a “first-dose” effect, in which postural hypotension or loss of consciousness may occur after the initial dose. Nursing teaching should include rising slowly from lying or sitting, sitting or lying down promptly if dizziness occurs, and using caution with activities that could be dangerous if light-headedness develops. Taking the initial dose at bedtime may reduce injury risk if hypotension occurs. These symptoms are clinically important because they can signal excessive blood-pressure reduction and increase fall risk, especially in older adults or patients also receiving other antihypertensive medications. Authoritative

#### QUESTION NO: 51

All of the following are clinical manifestations indicating male climacteric except \_\_\_\_\_.

- A. hot flashes
- B. loss of reproductive ability
- C. headaches
- D. heart palpitations

#### ANSWER: B

##### Explanation:

“Loss of reproductive ability” is the exception because aging-related declines in testosterone do not produce a complete, universal cessation of reproductive capacity in men. Male climacteric, often discussed clinically in relation to late-onset hypogonadism, differs from menopause because it is not defined by an abrupt and irreversible end to gamete production. Testosterone levels and sperm quality may gradually decline with age, and fertility can be reduced by age, comorbid illness, medications, or impaired testicular function. However, many older men retain the ability to produce sperm and potentially father children. Therefore, an absolute loss of reproductive ability is not an expected clinical manifestation of the male climacteric. Assessment should focus on the individual’s symptoms, health history, physical examination, and appropriately obtained hormone testing rather than assuming that age alone eliminates fertility. The National Institute on Aging notes that testosterone levels decline gradually with age and that symptoms require clinical evaluation; the Endocrine Society similarly recommends diagnosis only when consistent symptoms accompany unequivocally low testosterone concentrations. See the [National Institute on Aging overview of testosterone and aging](#) and the [Endocrine Society testosterone therapy guideline](#).

#### QUESTION NO: 52

A man expresses surprise that his wife has become very withdrawn during hospitalization for pneumonia.

Which response helps the husband understand how some people cope with hospitalization?

- A. “Hospitalization might cause a crisis. Has your wife had to cope with problems before this?”
- B. “Some people react that way. She will be more talkative when she feels better.”
- C. “Your wife might be feeling concern that she cannot fulfill her normal roles.”
- D. “This is typical behavior for someone who is as ill as your wife.”

#### ANSWER: A

##### Explanation:

“Hospitalization might cause a crisis. Has your wife had to cope with problems before this?” is the most therapeutic response because it recognizes that hospitalization can disrupt a person’s sense of safety, independence, usual routines, and control. Withdrawal may be a coping response when a client feels overwhelmed by acute illness, an unfamiliar environment, dependence on others, or uncertainty about recovery. The response also avoids assuming a single cause for the wife’s behavior. Instead, it invites the husband to consider her established ways of handling stress, which can help the nurse and family better understand her current reaction and identify supportive approaches that have been helpful in the past. Exploring prior coping is consistent with nursing assessment: the nurse gathers individualized information before drawing conclusions or offering reassurance. This approach supports a therapeutic partnership with the family while acknowledging that emotional and behavioral responses to illness and hospitalization vary among individuals. NCSBN emphasizes assessment of client needs and the use of therapeutic communication in safe, client-centered nursing care. See the [NCSBN NCLEX publications](#) and the [NCBI overview of crisis intervention](#).

**QUESTION NO: 53**

A client who is immobilized secondary to traction is complaining of constipation.

Which of the following medications should the nurse expect to be ordered?

- A. Advil
- B. Anasaid
- C. Clinocil
- D. Colace

**ANSWER: D****Explanation:**

Colace is the expected medication because it is the brand name for docusate, a stool softener commonly used to help prevent or relieve constipation when straining should be minimized or when decreased mobility contributes to hard stools. Immobilization during traction can reduce normal gastrointestinal motility and make bowel elimination more difficult. Docusate acts as a surfactant, allowing water and fats to penetrate the stool; this softens fecal material and supports easier, more comfortable evacuation. It is generally used along with nursing measures that promote bowel function as permitted by the client's condition, such as adequate fluid intake, dietary fiber when appropriate, privacy, and a regular toileting routine. The medication is intended for short-term management or prevention of constipation rather than rapid bowel evacuation, so the nurse should assess the client's bowel pattern, abdominal status, fluid intake, and response to therapy. Medication information from [MedlinePlus: Docusate](#) describes docusate as a stool softener that helps make bowel movements easier. The [NCBI StatPearls review of docusate](#) also explains its role in softening stool by facilitating water and lipid penetration.

**QUESTION NO: 54**

Ethical and moral issues concerning restraints include all of the following except \_\_\_\_\_.

- A. emotional impact on the client and family
- B. dignity of the client
- C. client's quality of life
- D. policies and procedures

**ANSWER: D****Explanation:**

Policies and procedures is correct because it refers primarily to the organizational and regulatory framework that directs how restraints are ordered, applied, monitored, documented, and discontinued. Facility policies are important safety and compliance tools, helping staff meet legal requirements and follow evidence-based processes. However, a policy itself is not an ethical or moral concern in the same sense as the effects of restraint use on an individual client's autonomy, dignity, well-being, relationships, and lived experience.

Ethical decision-making about restraints centers on balancing the duty to prevent immediate harm with the client's rights, freedom, and personhood. Nurses should use the least restrictive intervention, assess whether a restraint remains necessary, involve the client or representative as appropriate, and remove restraints as soon as safely possible. Policies and procedures support these responsibilities by translating professional, legal, and regulatory expectations into consistent bedside practice. The Centers for Medicare & Medicaid Services requires that restraint use be limited to situations in which less restrictive interventions have been ineffective and discontinued at the earliest possible time. See the [CMS Conditions of Participation for Patient Rights](#) and the [NCLEX-PN Test Plan](#).

**QUESTION NO: 55**



A client with massive chest and head injuries is admitted to the ICU from the Emergency Department. All of the following are true *except*:

- A. B.the physician in charge of the case is the only person allowed to decide whether organ donation can occur.
- B. C.the client's legally responsible party may make the decision for organ donation for the donor if the client is unable to do so.
- C. D.the organ procurement organization makes the decision regarding which organs to harvest.

**ANSWER: A**

**Explanation:**

The physician in charge of the case is the only person allowed to decide whether organ donation can occur is the exception because organ donation is not a decision that rests solely with the treating physician. The client's documented donation authorization, such as a donor registry record or donor designation on a driver's license, guides the process when present. If the client has not made a legally binding authorization, the appropriate legally authorized representative may be asked to make an authorization decision in accordance with applicable state law. The organ procurement organization also has an essential, legally defined role: it evaluates medical suitability, discusses donation with the family or authorized decision-maker when indicated, coordinates recovery planning, and works with the hospital clinical team. The physician's role includes providing appropriate end-of-life care, notifying or referring the potential donor to the organ procurement organization as required by hospital policy and law, and collaborating in the donation process; it is not unilateral authorization for donation. This collaborative structure protects patient autonomy, supports informed family decisions, and separates donation coordination from the clinical care team's primary duty to the patient. See the [OrganDonor.gov donation process overview](#) and the [CMS organ procurement organization requirements](#).

**QUESTION NO: 56**

The nurse applies soft wrist restraints to a confused client who repeatedly attempts to remove a necessary intravenous line after less restrictive measures have failed.

Which of the following nursing actions are appropriate? (Choose all that apply.)

- A. Use less restrictive measures before applying restraints.
- B. Secure the restraint to the bed frame.
- C. Assess circulation and skin integrity regularly.
- D. Document the behavior that required restraint use.
- E. Attach the restraint to the side rail.
- F. Apply the restraint without obtaining the required order.

**ANSWER: A B C D**

**Explanation:**

Restraints may be used only when necessary to protect the client or others after less restrictive interventions have been attempted or are ineffective. The nurse should obtain the required health care provider order according to facility policy, secure the restraints to the bed frame rather than the side rails, assess circulation and skin integrity regularly, and document the behavior requiring restraint and the client's response. Restraints should be removed at regular intervals to provide care, assess the client, and determine whether continued restraint is needed. See the [CMS guidance on patient rights and restraints](#).

**QUESTION NO: 57**

Select all the possible opportunistic infections that adversely affect HIV/AIDS infected patients. (Choose all that apply.)

- A. Visual losses
- B. Kaposi's sarcoma
- C. Wilms' sarcoma
- D. Tuberculosis
- E. Peripheral neuropathy
- F. *Toxoplasma gondii*

**ANSWER: D F**

**Explanation:**

Tuberculosis and *Toxoplasma gondii* are opportunistic infections of major clinical importance in people with HIV, particularly when immune function is substantially impaired. HIV damages CD4 T-lymphocyte-mediated immunity, increasing susceptibility to infections that may be controlled or latent in immunocompetent people. Tuberculosis can occur at any CD4 count in a person with HIV, and HIV infection increases the risk that latent tuberculosis infection will progress to active disease. Active tuberculosis may involve the lungs or present as extrapulmonary or disseminated disease, so screening and prompt evaluation are essential components of HIV care.

*Toxoplasma gondii* causes toxoplasmosis, most commonly through reactivation of latent infection when CD4 counts are low. In advanced HIV, toxoplasmosis frequently involves the central nervous system and can cause toxoplasmic encephalitis, a serious condition associated with headache, confusion, focal neurologic deficits, and seizures. Prevention includes assessing toxoplasma immunoglobulin G status and using indicated antimicrobial prophylaxis in patients with severe immunosuppression. These conditions are included among infections addressed in HIV opportunistic-infection guidance. See the [NIH Adult and Adolescent Opportunistic Infection Guidelines](#) and the [CDC overview of tuberculosis and HIV](#).

**QUESTION NO: 58**

In infants and children, the side effects of first-generation over-the-counter (OTC) antihistamines, such as diphenhydramine (Benedryl) and hydroxyzine (Atarax), can include:

- A. Reye's syndrome.
- B. cholinergic effects.
- C. paradoxical CNS stimulation.
- D. nausea and diarrhea.

**ANSWER: C**

**Explanation:**

**paradoxical CNS stimulation.** is correct because first-generation antihistamines readily cross the blood-brain barrier and act within the central nervous system. Although these medicines commonly cause drowsiness, infants and children can have the opposite, paradoxical response. This reaction may present as excitation, increased activity, nervousness, restlessness, irritability, insomnia, confusion, or unusual behavioral changes. In a young child, this stimulation can be clinically significant because it may be mistaken for worsening illness or behavioral dysregulation. Nursing assessment should include the medication name, dose, timing, use of combination cold products, and the child's level of alertness and behavior after administration. Caregivers should be instructed to follow age- and dose-specific directions, avoid giving more than one product containing an antihistamine, and seek urgent guidance for severe agitation, altered consciousness, breathing concerns, or suspected overdose. The U.S. Food and Drug Administration notes that antihistamines in cough-and-cold products can cause serious adverse effects in very young children, reinforcing the importance of cautious pediatric use. Diphenhydramine labeling specifically recognizes that excitation may occur, particularly in children. See the [FDA guidance on cough and cold medicines in children](#) and [DailyMed diphenhydramine labeling](#).

**QUESTION NO: 59**

A nurse is working in a pediatric clinic and a mother brings in her 13-month-old child who has Down Syndrome. The mother reports, "My child's muscles feel weak and he isn't moving well. My RN friend check his reflexes and she said they are diminished." Which of the following actions should the nurse take first?

- A. Contact the physician immediately
- B. Have the patient go to X-ray for a c-spine work-up.
- C. Start an IV on the patient
- D. Position the child's neck in a neutral position

**ANSWER: D****Explanation:**

"Position the child's neck in a neutral position" is the priority because new weakness, impaired movement, and diminished reflexes in a child with Down syndrome may signal spinal cord compromise from atlantoaxial instability or atlantoaxial subluxation. Children with Down syndrome have a higher prevalence of upper cervical spine laxity, and neurologic changes can indicate that cervical movement could worsen compression or injury. The immediate nursing action is therefore to protect the cervical spine: keep the neck aligned in a neutral position, minimize flexion, extension, and rotation, and avoid unnecessary movement while urgent medical assessment is arranged. This action follows the safety-first principle of preventing further neurologic damage when cervical spinal pathology is suspected. Neutral positioning is an appropriate initial stabilization measure in the clinic setting and supports safe subsequent evaluation, including provider-directed diagnostic imaging and treatment. The American Academy of Pediatrics identifies myelopathic symptoms, including weakness and gait or motor changes, as reasons for prompt evaluation in children with Down syndrome. Additional clinical background on atlantoaxial instability is available from [the American Academy of Pediatrics](#) and [NCBI Bookshelf](#).

**QUESTION NO: 60**

Light therapy can be effective for \_\_\_\_\_.

- A. overcoming weight problems
- B. helping with allergies
- C. use in alternative medical treatments
- D. working with sleep patterns

**ANSWER: D****Explanation:**

Light therapy can be effective for working with sleep patterns. Carefully timed exposure to bright light helps regulate the body's circadian rhythm, the internal timing system that influences sleep and wakefulness. Light is a major environmental cue for this rhythm: morning light generally shifts the sleep-wake schedule earlier, while evening light can shift it later. Clinical bright-light therapy may therefore be used as part of a treatment plan for circadian-rhythm sleep-wake disorders, including delayed sleep-wake phase disorder, and for sleep disruption associated with shift work. The timing, intensity, and duration of light exposure should be individualized by a qualified clinician because improperly timed light can worsen insomnia or cause an undesired shift in the sleep schedule. The American Academy of Sleep Medicine describes strategically timed light therapy as an intervention for circadian-rhythm sleep-wake disorders. The National Institute of General Medical Sciences also explains that light exposure is central to synchronizing circadian rhythms with the daily light-dark cycle. See [American Academy of Sleep Medicine clinical practice guideline](#) and [NIGMS: Circadian Rhythms fact sheet](#).

**QUESTION NO: 61**

A client is scheduled for surgery and has signed the informed-consent form.

Which of the following nursing actions are appropriate? (Choose all that apply.)

- A. Witness the client's signature on the consent form.
- B. Verify that the client signed the form voluntarily.
- C. Notify the surgeon if the client has unanswered questions.
- D. Explain all surgical risks and alternatives to the client.
- E. Obtain the client's signature after preoperative sedation is administered.

**ANSWER: A B C**

**Explanation:**

The nurse may witness the client's signature, verify that the client signed voluntarily, and ensure that the signed form is present in the medical record before the procedure. The nurse should also notify the surgeon or other qualified practitioner if the client has unanswered questions or indicates a lack of understanding. The provider performing the procedure is responsible for explaining the procedure, expected benefits, material risks, alternatives, and consequences of refusing treatment.

The nurse should not independently explain surgical risks or obtain consent after the client has received a sedative because sedation can impair decision-making capacity. Informed consent requires that the client have adequate information, decision-making capacity, and freedom from coercion. The [American Medical Association guidance on informed consent](#) describes these essential elements.

**QUESTION NO: 62**

The school nurse is conducting health screenings on schoolchildren. During the screening, she identifies a child with the behavioral characteristics of attention deficit disorder.

Which of the following behaviors is consistent with this disorder?

- A. slow speech development
- B. overreaction to stimuli from the surroundings
- C. inability to carry on a conversation
- D. concrete thinking

**ANSWER: B**

**Explanation:**

Overreaction to stimuli from the surroundings is consistent with attention-deficit/hyperactivity disorder, the current diagnostic term encompassing the presentation historically called attention deficit disorder. A central feature is difficulty regulating attention: the child may be unusually responsive to noises, movement, activity, or other environmental input and readily shift focus from a task to an external stimulus. In a school screening, this can appear as looking away from work whenever activity occurs nearby, losing track of instructions after a minor interruption, or having difficulty remaining engaged in a quiet, structured activity when the environment is stimulating. This behavioral pattern reflects distractibility and impaired sustained attention rather than an isolated developmental delay. Clinical assessment considers whether these symptoms occur persistently, are developmentally inappropriate, are present in more than one setting, and interfere with functioning at school, home, or with peers. Screening observations do not independently establish a diagnosis, but noticing heightened distractibility in response to ordinary surroundings appropriately supports referral for a comprehensive evaluation. The American Psychiatric Association describes ADHD as involving persistent inattention and/or hyperactivity-impulsivity that interferes with functioning, while the CDC identifies being easily distracted as a common manifestation of inattention. See the [American Psychiatric Association overview of ADHD](#) and the [CDC ADHD signs and symptoms guidance](#).

**QUESTION NO: 63**

American families are having difficulty adequately performing their vital health care function.

What are the basic reasons for this difficulty?

- A. structure of the health care system and family structure
- B. psychological factors for men and women seeking health care
- C. conditions being labeled disabilities and seen as too time consuming
- D. health care organizations (HMOs) and disconnected families

**ANSWER: A**

**Explanation:**

The basic reasons are the structure of the health care system and family structure. A family's ability to carry out health-related functions—including recognizing health needs, obtaining preventive and acute care, following treatment plans, and supporting members with chronic conditions—is influenced by the resources and accessibility of the health system as well as by the family's own organization and circumstances. Health-system factors may include affordability, insurance coverage, availability of appropriate services, care coordination, and whether clinicians establish effective partnerships with families. Family-structure factors include household composition, caregiving roles, income, employment demands, transportation, health literacy, and the presence of social support. These influences can affect whether and how consistently family members obtain needed care. The nurse should assess both the family's strengths and barriers and collaborate with the family to support realistic, accessible health goals. This family-centered perspective aligns with public-health efforts to reduce barriers to care and promote equitable access to services. See the [Healthy People 2030 Health Care Access and Quality](#) objective area and the [CDC health literacy guidance](#).

#### QUESTION NO: 64

A client recently lost a child due to poisoning. The client tells the nurse, "I don't want to make any new friends right now." This is an example of \_\_\_\_\_ indicator of stress.

- A. emotional behavioral indicator
- B. spiritual indicator
- C. sociocultural indicator
- D. intellectual indicator

**ANSWER: C**

**Explanation:**

"Sociocultural indicator" is correct because the client's statement describes a stress response that affects social relationships and participation with other people. Following the devastating loss of a child, a person may temporarily withdraw from friends, avoid forming new relationships, reduce social activities, or feel disconnected from usual support systems. These changes reflect the social and cultural dimensions of stress: stress can influence how an individual relates to family, peers, community, and other sources of interpersonal support.

The nurse should recognize this statement as a possible expression of grief and stress, assess the client's available support network and coping resources, and use therapeutic communication to invite further discussion without pressuring the client to socialize before they are ready. Supportive care includes acknowledging the loss, allowing expression of grief, and helping the client identify acceptable sources of support when appropriate. The National Institute of Mental Health notes that grief can involve changes in social functioning and daily life, while the American Psychiatric Association describes bereavement as a response that can affect interpersonal functioning. See [NIMH: Coping With Traumatic Events](#) and [American Psychiatric Association: Prolonged Grief Disorder](#).

#### QUESTION NO: 65

New parents ask their newborn's neonatal nurse about safety tips for their home with their new baby.

Which statement by the nurse is most appropriate?

- A. "Have a blanket and a bumper in the crib for warmth and injury prevention."
- B. "Keep all stuffed animals, pillows, blankets, bumpers, etc. out of the crib."
- C. "Mattresses should be tight-fitting and crib bars should have at least 3 inches of space between each bar."
- D. "Do not smoke in the baby's room. Other rooms are okay as long as the baby isn't in them."

**ANSWER: B**

**Explanation:**

"Keep all stuffed animals, pillows, blankets, bumpers, etc. out of the crib." is the most appropriate teaching because a newborn should sleep alone on their back in a safety-approved crib, bassinet, portable crib, or play yard with a firm, flat mattress and fitted sheet only. Soft items and loose bedding can obstruct an infant's airway or cause entrapment and are associated with sleep-related infant deaths, including sudden unexpected infant death. Crib bumpers are not safe; the U.S. Consumer Product Safety Commission prohibits their manufacture and sale because they create a hazardous sleep environment. Parents can keep the infant warm by using appropriate sleep clothing, such as a wearable blanket or sleep sack, rather than placing loose blankets in the sleep space. This guidance should be reinforced for every sleep period, including naps, and applies whether the newborn sleeps in the parents' room or another room. Room-sharing without bed-sharing is recommended during the early months because it supports supervision while preserving a separate, uncluttered sleep surface. For current safe-sleep recommendations, see the [CDC's safe sleep guidance](#) and the [U.S. Consumer Product Safety Commission Safe Sleep resources](#).

**QUESTION NO: 66**

A central venous pressure reading of 11cm/H(2)O of an IV of normal saline is determined by the nurse caring for the patient. The patient has a diagnosis of pericarditis. Which of the following is the most applicable:

- A. The patient has a condition of hypovolemia.
- B. Not enough fluid has been given to the patient.
- C. Pericarditis may cause pressures greater than 10cm/H(2)O with testing of CVP.
- D. The patient may have a condition of arteriosclerosis.

**ANSWER: C**

**Explanation:**

Pericarditis may cause pressures greater than 10cm/H(2)O with testing of CVP. A central venous pressure (CVP) of 11 cm H<sub>2</sub>O is elevated above the usual clinical range and reflects increased right-sided filling pressure. In a patient with pericarditis, inflammation can be associated with pericardial fluid accumulation. When fluid or a stiff, inflamed pericardium restricts ventricular filling, venous blood returning to the heart encounters increased resistance. This can raise right atrial pressure and therefore increase CVP. Clinically, a rising CVP in this setting warrants careful assessment for manifestations of impaired cardiac filling, including jugular venous distention, hypotension, tachycardia, dyspnea, and diminished urine output. The finding should be interpreted together with the patient's overall hemodynamic condition and monitored for progression, because significant pericardial effusion can lead to cardiac tamponade. The Merck Manual notes that elevated jugular venous pressure is a characteristic finding in cardiac tamponade, reflecting impaired venous return and filling of the heart. See [Merck Manual: Cardiac Tamponade](#) and [StatPearls: Central Venous Pressure](#).

**QUESTION NO: 67**

The nurse is caring for a client with *Clostridioides difficile* infection.



Which of the following interventions should the nurse implement? (Choose all that apply.)

- A. Wash hands with soap and water after providing care.
- B. Wear gloves and a gown when entering the room.
- C. Use dedicated equipment when possible.
- D. Use a sporicidal product for environmental cleaning.
- E. Place the client in a negative-pressure room.
- F. Wear an N95 respirator for routine care.

**ANSWER: A B C D**

**Explanation:**

A client with *Clostridioides difficile* infection requires Contact Precautions. The nurse should wear gloves and a gown when entering the room and use dedicated equipment when possible. Handwashing with soap and water is preferred after caring for the client because alcohol-based hand sanitizer does not reliably remove *C. difficile* spores. Environmental cleaning with an EPA-registered sporicidal product is also necessary to reduce environmental contamination and transmission.

The client does not require airborne isolation, a negative-pressure room, or an N95 respirator for routine care. The Centers for Disease Control and Prevention recommends Contact Precautions and soap-and-water hand hygiene for management of *C. difficile* infection. See the [CDC clinical guidance for \*C. difficile\*](#).

**QUESTION NO: 68**

Regardless of their practice area, nurses should be concerned with \_\_\_\_\_.

- A. all drug-resistant bacteria
- B. microorganisms that are critical
- C. transmission of microorganisms
- D. overprescription of bacteriostatic drugs

**ANSWER: C**

**Explanation:**

Transmission of microorganisms is correct because infection prevention and control are responsibilities of every nurse, regardless of setting or specialty. Nurses routinely encounter clients, family members, coworkers, equipment, body fluids, and environmental surfaces that can serve as links in the chain of infection. Preventing transmission protects both the client receiving care and the health care team, including the nurse.

Aseptic practice is a core nursing responsibility used to interrupt this transmission. This includes applying Standard Precautions to all client care, performing hand hygiene at the appropriate times, selecting and using personal protective equipment based on anticipated exposure, safely handling sharps and contaminated items, and maintaining clean or sterile technique when indicated. These measures are based on the possibility that infectious organisms may be present even when infection has not been identified.

The Centers for Disease Control and Prevention identifies Standard Precautions as the minimum infection-prevention practices that apply to all patient care in all health care settings. NCLEX-PN safety and infection-control content similarly emphasizes protecting clients and health care personnel through practices that prevent infection and its spread. See the [CDC Standard Precautions guidance](#) and the [NCSBN NCLEX test plans](#).

**QUESTION NO: 69**

Increased cortisol levels might be found in a client with which condition?

- A. Cushing's syndrome
- B. Addison's disease
- C. renal failure
- D. congestive heart failure

**ANSWER: A**

**Explanation:**

Cushing's syndrome is correct because it results from prolonged exposure to excessive glucocorticoids, particularly cortisol. The condition may arise from excess adrenocorticotrophic hormone secretion, such as with a pituitary adenoma; autonomous cortisol production by an adrenal tumor; ectopic adrenocorticotrophic hormone production; or long-term therapeutic corticosteroid use. Elevated cortisol produces characteristic clinical findings that nursing staff should recognize, including central weight gain, facial rounding, dorsocervical fat accumulation, skin fragility, easy bruising, delayed wound healing, muscle weakness, hypertension, and hyperglycemia. Cortisol also suppresses immune and inflammatory responses, increasing susceptibility to infection. Evaluation for suspected endogenous Cushing's syndrome commonly uses tests that demonstrate cortisol excess, such as late-night salivary cortisol, 24-hour urinary free cortisol, or a low-dose dexamethasone suppression test. Recognizing the association between Cushing's syndrome and increased cortisol helps guide assessment, monitoring of complications such as elevated blood glucose and blood pressure, and timely referral for diagnostic evaluation. See the [National Institute of Diabetes and Digestive and Kidney Diseases overview of Cushing's syndrome](#) and the [NCBI Bookshelf review of Cushing syndrome](#).

**QUESTION NO: 70**

When a client with a major burn experiences body image disturbance, which of the following is an appropriate nursing intervention classification?

- A. grief work facilitation
- B. vital signs monitoring
- C. medication administration: skin
- D. anxiety reduction

**ANSWER: A**

**Explanation:**

Grief work facilitation is the appropriate intervention classification because major burns can produce permanent or evolving changes in appearance, function, independence, and social roles. A disturbed body image may therefore involve a genuine sense of loss of the client's previous appearance, abilities, identity, or anticipated future. Grief work facilitation supports the client in identifying and expressing feelings such as sadness, anger, fear, or shame; discussing the meaning of the changes; recognizing personal strengths and available support; and gradually integrating the altered body image into a realistic self-concept. This intervention is consistent with burn rehabilitation, which addresses psychosocial recovery as well as wound healing and physical function. Nursing care should provide a therapeutic, nonjudgmental setting and encourage the client's participation in care and adjustment at an individual pace. Supporting healthy grieving can promote adaptation, self-esteem, and progress toward acceptance of body-image changes. The National Library of Medicine describes the substantial emotional and psychosocial effects of burn injury and the importance of rehabilitation care in recovery: [Burn Injury—StatPearls](#). Additional guidance on psychosocial support after burns is available from the [American Burn Association](#).

**QUESTION NO: 71**

The nurse is teaching parents of a newborn about feeding their infant.

Which of the following instructions should the nurse include?

- A. Use the defrost setting on microwave ovens to warm bottles.
- B. When refrigerating formula, don't feed the baby partially used bottles after 24 hours.
- C. When using formula concentrate, mix two parts water and one part concentrate.
- D. If a portion of one bottle is left for the next feeding, go ahead and add new formula to fill it.
- E. Discard any formula remaining in a bottle within 1 hour after feeding begins.

**ANSWER: E**

**Explanation:**

"Discard any formula remaining in a bottle within 1 hour after feeding begins" is the appropriate instruction because an infant's saliva enters the bottle during feeding. Saliva can introduce bacteria into the formula, and the combination of nutrients in formula and room-temperature exposure can support bacterial growth. Refrigerating a bottle after the infant has begun feeding does not make the leftover formula safe for a later feeding. Therefore, parents should prepare an amount likely to be consumed, use prepared formula promptly, and discard any remaining formula once 1 hour has elapsed from the start of the feeding.

This teaching is especially important for newborns, who have relatively immature immune defenses and may be more vulnerable to illness from contaminated feeding products. Parents should also use clean hands and feeding equipment, follow the manufacturer's mixing directions exactly, and check the formula temperature before feeding. The Centers for Disease Control and Prevention specifies that leftover formula from a feeding should be discarded within 1 hour after feeding begins. See the [CDC guidance on preparing and storing powdered infant formula](#) and the [American Academy of Pediatrics' formula-preparation guidance](#).

#### QUESTION NO: 72

A nurse is implementing a community awareness campaign about accidental poisoning.

Which of the following should she teach in the class?

- A. The child should be given milk.
- B. The child should be given syrup of Ipecac
- C. The poison control center should be contacted
- D. The child should be taken to the ER

**ANSWER: C**

**Explanation:**

The poison control center should be contacted is correct because prompt, expert poison-specific guidance is the appropriate first action after a suspected accidental ingestion or exposure when the child is awake and breathing. In the United States, Poison Help is available 24 hours a day at **1-800-222-1222** and connects callers to their regional poison center. Specialists assess the exact substance, amount, time of exposure, the child's age and weight, and current symptoms to give individualized instructions. This guidance helps determine whether safe home observation is appropriate or whether urgent emergency evaluation is needed. Families should keep the product container or label available so the specialist can identify the substance and provide accurate recommendations. If the child has collapsed, is having a seizure, has trouble breathing, or cannot be awakened, emergency services should be activated immediately by calling 911. Teaching families to contact Poison Help promptly supports rapid triage and avoids unsafe delays after a potential poisoning event. The national Poison Help program and the American Academy of Pediatrics provide public guidance on responding to suspected poison exposures: [Poison Help](#) and [American Academy of Pediatrics: Poisoning First Aid for Children](#).

#### QUESTION NO: 73

Select the ethical principles that are paired with their description. (Choose all that apply.)

- A. Justice: Being honest and fair
- B. Beneficence: Do no harm
- C. Veracity: Treating all patients equally
- D. Self-determination: Facilitating patient choices
- E. Beneficence: Do good
- F. Nonmaleficence: Do no harm
- G. Self-determination: Accountability

**ANSWER: D E F**

**Explanation:**

“Self-determination: Facilitating patient choices” is correctly paired because self-determination, often discussed as patient autonomy, recognizes each patient’s right to make informed decisions about care according to their values and goals. The practical nursing role includes supporting informed, voluntary choices, communicating patient preferences to the health care team, and protecting the patient from coercion.

“Beneficence: Do good” is correct because beneficence requires nurses to act for the patient’s benefit and promote well-being. This principle supports providing compassionate, clinically appropriate care that advances the patient’s health, comfort, safety, and interests.

“Nonmaleficence: Do no harm” is also correctly paired. Nonmaleficence obligates the nurse to avoid causing preventable injury or unnecessary suffering. In practice, this includes using safe techniques, recognizing risks, following established standards, and promptly addressing conditions that could harm the patient.

These principles align with professional nursing ethics: nurses respect patient dignity and rights, advocate for the patient, and practice with competence and safety. The [American Nurses Association Code of Ethics](#) describes nurses’ ethical duties, while the [NCSTN NCLEX test plans](#) identify ethical practice, client rights, and safe care as core nursing competencies.

**QUESTION NO: 74**

The PN is caring for a patient taking Lipitor (Atorvastatin).

Which of these statements would indicate that the patient may need reinforced teaching?

- A. “I take my Lipitor and my other morning medications with my grapefruit juice at breakfast.”
- B. “I take my Lipitor and wait 30 minutes before taking my other medications.”
- C. “I take my Lipitor 30 minutes after I eat something.”
- D. “I take my Lipitor with a glass of milk after my breakfast.”

**ANSWER: A**

**Explanation:**

“I take my Lipitor and my other morning medications with my grapefruit juice at breakfast.” indicates a need for reinforced teaching because grapefruit juice can raise atorvastatin concentrations in the bloodstream. Grapefruit inhibits intestinal CYP3A4, an enzyme involved in atorvastatin metabolism. When this pathway is inhibited, more active drug may be absorbed, increasing the patient’s exposure to atorvastatin. Higher exposure can increase the risk of dose-related adverse effects, particularly muscle toxicity. The patient should be taught to avoid grapefruit juice while taking atorvastatin unless the prescriber or pharmacist has specifically evaluated and approved its use. The nurse should also reinforce prompt reporting of unexplained muscle pain, tenderness, weakness, or dark-colored urine, as these symptoms may indicate clinically significant muscle injury. Atorvastatin may be taken with or without food, so the concern in this statement is specifically the

grapefruit juice rather than taking the medication at breakfast. The FDA describes grapefruit-drug interactions and identifies atorvastatin as a medication whose levels may be affected by grapefruit juice; atorvastatin product labeling also advises avoiding grapefruit juice. See the [FDA guidance on grapefruit juice and medicines](#) and the [Lipitor prescribing information](#).