Exam Blueprint and Specialty Competencies

Introduction – Blueprint for the Emergency Nursing Certification Exam

The primary function of the blueprint for the CNA Emergency Nursing Certification Exam is to describe how the exam is to be developed. Specifically, this blueprint provides explicit instructions and guidelines on how the competencies are to be expressed within the exam in order for accurate decisions to be made on the candidates' competence in emergency nursing.

The blueprint has two major components: (1) the content area to be measured and (2) the explicit guidelines on how this content is to be measured. The content area consists of the list of competencies (i.e., the competencies expected of fully competent practising emergency nurses with at least two years of experience), and the guidelines are expressed as structural and contextual variables. The blueprint also includes a summary chart that summarizes the exam guidelines.

Description of Domain

The CNA Emergency Nursing Exam is a criterion-referenced exam.[1] A fundamental component of a criterion-referenced approach to testing is the comprehensive description of the content area being measured. In the case of the Emergency Nursing Certification Exam, the content consists of the competencies of a fully competent practising emergency nurse with at least two years of experience.

This section describes the competencies, how they have been grouped and how they are to be sampled for creating an exam.

Developing the List of Competencies

The final list of competencies was approved by the Emergency Nursing Certification Exam Committee.

Assumptions

In developing the list of competencies for emergency nurses, the following assumptions were made:

[1] Criterion-referenced exam: An exam that measures a candidate's command of a specified content or skills domain or list of instructional objectives. Scores are interpreted in comparison to a predetermined performance standard or as a mastery of defined domain (e.g., percentage correct and mastery scores), independently of the results obtained by other candidates (Brown, 1983).

The Emergency Nurse

- The emergency nurse is a skilled health professional who maintains competence through continuing education, professional development, quality assurance activities and reflective practice.
- The emergency nurse respects the client's perception of the health problem and their right to self-referral.
- The emergency nurse provides nursing care that demonstrates compliance with the Canadian Nurses Association's Code of Ethics.
- The emergency nurse practises in a manner consistent with their respective regulatory body.
- The emergency nurse practises in a manner consistent with current legislation that influences emergency care and the practice of nursing.
- The emergency nurse develops a therapeutic relationship with the client and their significant others within a limited time frame.
- The emergency nurse advocates for the client and their significant others.
- The emergency nurse facilitates the ability of the client and their significant others to identify and cope with stressors related to illness and injury.
- The emergency nurse assists the client and their significant others to utilize measures to decrease the stressors that negatively impact the recovery of the client.
- The emergency nurse facilitates safe and efficient client referral.
- The emergency nurse facilitates safe and efficient intra- and inter-facility transfers.
- The emergency nursing assessment is continuous, comprehensive and holistic, using all available and appropriate resources.
- The emergency nurse documents assessment data, plan of care, client responses and outcomes within a time frame consistent with the client's condition.
- The emergency nurse provides compassionate, non-judgmental, ethical care in situations that may be challenging for staff and clients alike.
- The emergency nurse articulates and demonstrates the crucial role of the emergency nurse to other health-care professionals, the public and the media.
- The emergency nurse utilizes effective communication techniques (e.g., interpreters, crisis intervention, appropriate non-verbal behaviours).
- The emergency nurse functions safely and effectively in an unpredictable environment.

- The emergency nurse prioritizes client care in the context of the emergency environment.
- The emergency nurse participates in health and wellness promotion and injury prevention activities.
- The emergency nurse provides discharge planning information.
- The emergency nurse provides evidence-based practice and is responsible for promoting research within the specialty.
- The emergency nurse utilizes current technology as it relates to the practice of emergency nursing.
- The emergency nurse participates in continuous quality improvement activities within the workplace.

The Client

- The client may be an individual, a family, a community or a group.
- The client varies in age, gender, culture, socio-economic background and sexual orientation.
- The client is experiencing an unplanned and unexpected health situation that varies in severity and complexity.
- The client has a right to be cared for by a nursing professional and treated in order to achieve optimal functioning.
- The client may present a risk of injury/harm to self, staff and others (e.g., violence, infectious disease, left without being seen, left against medical advice, client elopement).

The Environment

- The environment is primarily a hospital setting.
- The environment is one in which the normal day/night cycle is irrelevant; the variety of client conditions can remain constant throughout the 24-hour period.
- The environment is unique in terms of the fluctuating volume of clients, the variety of health problems and dynamic nature of client acuity, and the unscheduled and unpredictable manner in which clients arrive.
- The environment allows for varied intensity and duration of professional nursing contact with clients and others.
- The environment is influenced by challenges of client flow, length of stay and access to inpatient care.
- The environment is one in which limited space and a lack of control over the number of clients and client acuity level can stress available resources.

Competency Categories

The competencies are classified under a twenty-one-category scheme commonly used to organize emergency nursing.

Some of the competencies lend themselves to one or more of the categories; therefore, these twenty-one categories should be viewed simply as an organizing framework. Also, it should be recognized that the competency statements vary in scope, with some representing global behaviours and others more discrete and specific nursing behaviours.

Competency Sampling

Using the grouping and the guideline that the Emergency Nursing Certification Exam will consist of approximately 165 questions, the categories have been given the following weights in the total examination.

Table 1: Competency Sampling

Categories	Approximate weights in the total examination
1. Triage	5-9%
2. Respiratory	6-10%
3. Cardiovascular	7-11%
4. Neurological	5-9%
5. Multi-system Trauma	5-9%
6. Maxillofacial, Eye, Ear, Nose and Throat (EENT)	2-6%
7. Gastrointestinal	5-9%
8. Genitourinary	2-6%
9. Obstetrical client and Female Reproductive System	2-4%
10. Musculoskeletal/Integumentary	4-8%
11. Environmental Emergencies	2-4%
12. Immunology/Haematology/Endocrinology	4-8%
13. Relationship violence/Sexual assault	2-6%
14. Toxicology/Substance Use	3-5%
15. Mental Health	4-8%
16. Infectious Disease	3-7%
17. Psychosocial	1-3%
18. Discharge Planning/Client Education	1-3%

Categories	Approximate weights in the total examination
19. Professional Practice, Legal and Ethical Issues	1-3%
20. Psychological Safety	1-3%
21. Disaster/Emergency Preparedness	1-3%

Technical Specifications

In addition to the specifications related to the competencies, other variables are considered during the development of the Emergency Nursing Certification Exam. This section presents the guidelines for two types of variables: structural and contextual.

Structural Variables: Structural variables include those characteristics that determine the general appearance and design of the exam. They define the length of the exam, the format and presentation of the exam questions (e.g., multiple-choice format) and special functions of exam questions (e.g., case-based or independent questions).

Contextual Variables: Contextual variables specify the nursing contexts in which the exam questions will be set (e.g., client culture, client health situation and health-care environment).

Structural Variables

Exam Length: The exam consists of approximately 165 multiple-choice questions.

Question Presentation: The multiple-choice questions are presented in one of two formats: case-based or independent. Case-based questions are a set of approximately four questions associated with a brief health-care scenario (i.e., a description of the client's health-care situation). Independent questions stand alone. In the Emergency Nursing Certification Exam, 65 to 75 per cent of the questions are presented as independent questions and 25 to 35 per cent are presented within cases.

Taxonomy for Questions: To ensure that competencies are measured at different levels of cognitive ability, each question on the Emergency Nursing Certification Exam is aimed at one of three levels: knowledge/comprehension, application and critical thinking.[2]

[2] These levels are adapted from the taxonomy of cognitive abilities developed in Bloom (1956).

1. **Knowledge/Comprehension**
   This level combines the ability to recall previously learned material and to understand its meaning. It includes such mental abilities as knowing and understanding definitions, facts and principles and interpreting data (e.g., knowing the effects of certain drugs or interpreting data appearing on a client's record).

2. **Application**
   This level refers to the ability to apply knowledge and learning to new or practical situation. It includes applying rules, methods, principles and theories in providing care to clients (e.g., applying nursing principles to the care of clients).

3. **Critical Thinking**
   The third level of the taxonomy deals with higher-level thinking processes. It includes the abilities to judge the relevance of data, to deal with abstraction and to solve problems (e.g., identifying priorities of care or evaluating the effectiveness of interventions). The emergency nurse with at least two years of experience should be able to identify cause-and-effect relationships, distinguish between relevant and irrelevant data, formulate valid conclusions and make judgments concerning the needs of clients.

The following table presents the distribution of questions for each level of cognitive ability.

Table 2: Distribution of Questions for Each Level of Cognitive Ability

Cognitive Ability Level	Percentage of questions on Emergency Nursing Exam
Knowledge/Comprehension	15-30%
Application	35-55%
Critical Thinking	25-40%

Contextual Variables

Client Age: The contextual variable specified for the Emergency Nursing Certification Exam is the age of the client. Providing specifications for the use of the variable ensures that the client described in the exam represent the demographic characteristics of the population encountered by the emergency nurse.

Client Culture: Questions are included that measure awareness, sensitivity and respect for different cultural values, beliefs and practices, without introducing stereotypes.

Client Health Situation: In the development of the Emergency Nursing Exam, the client is viewed holistically. The client health situations presented reflect a cross-section of health situations encountered by emergency nurses.

Health-Care Environment: It is recognized that emergency nursing is practiced primarily in the hospital setting. However, emergency nursing can also be practiced in other settings. Therefore, for the purposes of the Emergency Nursing Certification Examination, the health-care environment is only specified where it is required for clarity or in order to provide guidance to the examinee.

Conclusions

The blueprint for the Emergency Nursing Certification Exam is the product of a collaborative effort between CNA, YAS and a number of emergency nurses across Canada. Their work has resulted in a compilation of the competencies required of practising emergency nurses and has helped determine how those competencies will be measured on the Emergency Nursing Certification Exam. A summary of these guidelines can be found in the summary chart Emergency Nursing Certification Development Guidelines.

Emergency nursing practice will continue to evolve. As this occurs, the blueprint may require revision so that it accurately reflects current practices. CNA will ensure that such revision takes place in a timely manner and will communicate any changes in updated editions of this document.

Summary Chart

Emergency Nursing Exam Development Guidelines

STRUCTURAL VARIABLES		
Examination Length and Format	Approximately 165 multiple choice questions	
Question Presentation	65-75 % independent questions 25-35 % case-based questions	
The Cognitive Domain	Knowledge/Comprehension Application Critical Thinking	15-30 % of the questions 35-55 % of the questions 25-40 % of the questions

Competency Categories	Weight of Category in the Overall Exam
1. Triage	5-9% of the questions
2. Respiratory	6-10% of the questions
3. Cardiovascular	7-11% of the questions
4. Neurological	5-9% of the questions
5. Multi-system Trauma (8 competencies)	5-9% of the questions
6. Maxillofacial, Eye, Ear, Nose and Throat (EENT)	2-6% of the questions
7. Gastrointestinal	5-9% of the questions
8. Genitourinary	2-6% of the questions
9. Obstetrical client and Female Reproductive System	2-4% of the questions
10. Musculoskeletal/Integumentary	4-8% of the questions
11. Environmental Emergencies	2-4% of the questions
12. Immunology/Haematology/Endocrinology	4-8% of the questions
13. Relationship Violence/Sexual	2-6% of the questions
14. Toxicology/Substance Use	3-5% of the questions
15. Mental Health	4-8% of the questions
16. Infectious Disease	3-7% of the questions
17. Psychosocial	1-3% of the questions
18. Discharge Planning/Client Education	1-3% of the questions
19. Professional Practice Issues Legal and Ethical Issues	1-3% of the questions
20. Psychological Safety	1-3% of the questions
21. Disaster/Emergency Preparedness	1-3% of the questions

CONTEXTUAL VARIABLES	
Client Age	0 to 18 years 25-35% 19 to 64 years 30-40% 65+ years 30-40%
Client Culture	Questions are included that measure awareness, sensitivity, and respect for different cultural values, beliefs, and practices, without introducing stereotypes.
Client Health Situation	In the development of the Emergency Nursing Certification Examination, the client is viewed holistically. The client health situations presented also reflect a cross section of health situations encountered by emergency nurses.
Health-Care Environment	It is recognized that emergency nursing is practiced primarily in the hospital setting. However, emergency nursing can also be practiced in other settings. Therefore, for the purposes of the Emergency Nursing Certification Examination, the health-care environment is only specified where it is required for clarity or in order to provide guidance to the examinee.

The Emergency Nursing Exam List of Competencies

NOTE: The examples presented in the brackets following the competency statements are not meant to be an exhaustive list, but provide examples for clarification.

1. Triage

The emergency nurse…

1.1 Facilitates a safe and welcoming environment

1.2 Interprets data related to triage:

1.2a Subjective assessment
- Presenting complaint
- History (e.g., history of presenting illness or mechanism of injury [MOI], past medical history, allergies, immunization, current medications, substance use, recent travel, parents' perceptions, events surrounding the injury or illness, prior treatment, diet/diapers, last oral intake, last menses)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

1.2b Objective assessment
- Airway, breathing, circulation, disability, exposure/environment (ABCDE)
- General physical appearance (e.g., skin colour, fontanelles, diaphoresis, work of breathing, drainage, discharge, odours)
- Verbal and non-verbal cues (e.g., distress)
- Other physical assessments related to presenting illness or injury (e.g., first order modifiers [e.g., vital signs], second order modifiers [e.g., capillary blood glucose], inspection, palpation, auscultation, weight)

1.3 Prioritizes and reassesses clients based on the principles of the Canadian Emergency Department Triage and Acuity Scale (2016):

1.3a Level 1, Resuscitation

1.3b Level 2, Emergent

1.3c Level 3, Urgent

1.3d Level 4, Less Urgent

1.3e Level 5, Non-Urgent

1.4 Initiates time sensitive protocols (e.g., acute stroke, acute coronary syndrome [ACS]/ST elevation myocardial infarction [STEMI], sepsis)

1.5 Initiates risk screening (e.g., influenza-like illness [ILI], communicable diseases, systemic inflammatory response syndrome [SIRS]/sepsis, violence, suicidal ideation, falls)

1.6 Implements appropriate protocols (e.g., isolation/decontamination procedures)

1.7 Recognizes and manages aggressive behaviours

1.8 Directs the client to the appropriate treatment space based on triage assessment/factors

2. Respiratory

The emergency nurse…

2.1 Interprets the following data related to the respiratory system:

2.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, risk factors, past medical history)
- Manifestations (e.g., shortness of breath, cough, fatigue, dyspnea)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

2.1b Objective assessment

- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., airway patency, respiratory rate, depth, rhythm, tracheal position, chest wall symmetry, work of breathing/accessory muscle use, skin colour, capillary refill, non-verbal cues related to pain, diaphoresis, singed facial/nasal hair)
- Palpation (e.g., subcutaneous emphysema, tenderness, crepitus, deformities, chest wall integrity, skin temperature)
- Percussion
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, weight, Broselow tape)

2.1c Diagnostic results (e.g., blood gases, peak flow measurements, ECG, cultures, hematology, chemistry, end tidal CO_2, D-dimers, point of care ultrasound [POCUS], diagnostic imaging)

2.2 Selects nursing interventions to appropriately manage the following alterations in respiratory function:

2.2a partial or complete airway obstruction (e.g., tongue, epiglottitis, foreign bodies, angioedema, mucous plugs, croup)

2.2b blunt and penetrating chest trauma (e.g., rib fractures, flail chest, pulmonary contusion, pneumothorax, tension pneumothorax, hemothorax, protruding foreign body, open chest wound)

2.2c pulmonary embolism

2.2d inhalation injuries (e.g., gases, chemical, smoke, thermal, vaping)

2.2e asthma, status asthmaticus

2.2f chronic obstructive pulmonary disease (COPD)

2.2g pneumonia

2.2h bronchiolitis, acute bronchitis, respiratory syncytial virus (RSV)

2.2i pulmonary edema

2.2j respiratory arrest

Examples:
The following are examples of potential nursing interventions to appropriately manage alterations in respiratory function:

- Monitor and reassess ABCDE and vital signs
- Administer oxygen therapy
- Position the client (e.g., high-Fowler's)
- Perform airway techniques (e.g., chin lift, jaw thrust, use of oral and nasal airways, suctioning, bag-valve-mask)
- Assist with endotracheal intubation (e.g., rapid sequence induction/drug-assisted intubation)
- Assist with alternate ventilation management (e.g., bag-valve-mask ventilation, BiPAP, mechanical ventilation)
- Assist with surgical airway management (e.g., cricothyrotomy)
- Assist with endotracheal/tracheostomy tubes (e.g., suctioning)
- Monitor fluid balance (i.e., input and output)
- Assist with chest tube insertion and monitor chest drainage system

2.3 Selects nursing interventions related to pharmacological agents in the respiratory system (e.g., oxygen, bronchodilators, steroids, thrombolytic agents, analgesics, reversal agents, sedatives, neuromuscular blocking agents)

3. Cardiovascular

The emergency nurse…

3.1 Interprets the following data related to the cardiovascular system:

3.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, risk factors, past medical history)
- Manifestations, considering variations of age and sex (i.e., associated symptoms including nausea, shortness of breath, diaphoresis, syncope, cough, fatigue, fever)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

3.1b Objective assessment

- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., skin colour, diaphoresis, capillary refill, jugular venous distension, pulsating masses, non-verbal cues related to pain and anxiety, level of consciousness)
- Palpation (e.g., quality of peripheral/central pulses, skin temperature)
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., vital signs including mean arterial pressure [MAP], bilateral and/or postural blood pressure, weight, Broselow tape, fontanelles)

3.1c Diagnostic results (e.g., cardiac markers, hematology, coagulation studies, chemistry, toxicology, lactate, ECG, cultures, cardiac monitoring, blood type and screen, point of care ultrasound [POCUS], diagnostic imaging)

3.2 Selects nursing interventions to appropriately manage the following alterations in cardiovascular function:

3.2a acute coronary syndrome (e.g., angina, ischemia, infarction)

3.2b cardiac dysrhythmias

3.2c blunt cardiac injury (i.e., cardiac contusion)

3.2d cardiogenic shock

3.2e hypovolemic shock

3.2f obstructive shock (e.g., cardiac tamponade, tension pneumothorax)

3.2g distributive shock (e.g., anaphylactic, septic, neurogenic)

3.2h heart failure

3.2i hypertensive urgency/emergency

3.2j aortic aneurysm (e.g., abdominal and thoracic)

3.2k pericarditis, myocarditis and endocarditis

3.2l cardiomyopathy

3.2m cardiac arrest

Examples
The following are examples of potential nursing interventions to appropriately manage alterations in cardiovascular function:

- Monitor and reassess vital signs, perfusion, neurological status, neurovascular status and cardiac rhythms
- Initiate early sepsis screening and interventions (e.g., antibiotics, fluids, diagnostics)
- Initiate IV access as appropriate
- Initiate and maintain fluid resuscitation (e.g., crystalloids, blood products)
- Monitor fluid balance (i.e., input and output)
- Assist with/perform CPR, defibrillation, cardioversion, temporary external pacing, pericardiocentesis, targeted temperature management and central line insertion

3.3 Selects nursing interventions related to pharmacological agents in the cardiovascular system (e.g., antiplatelet agents, oxygen, analgesia, nitrates, anticoagulants, anticoagulant reversal agents, thrombolytic/fibrinolytic agents, inotropes, antihypertensives, antiarrhythmic agents)

4. Neurological

The emergency nurse…

4.1 Interprets the following data related to the neurological system:

4.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, timing, last seen normal, risk factors, past medical history, preceding events, trauma, substance use)
- Manifestations (e.g., headache, fatigue, altered level of consciousness, memory loss, syncope, vertigo, motor and sensory deficits, nausea and/or vomiting, seizures, cognition, orientation, changes in speech pattern, descriptors [i.e., worst headache of my life, thunderclap])
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

4.1b Objective assessment

- Behaviour (i.e., chronic or acute change; e.g., co-operative, combative, agitated, confused)
- Inspection (e.g., speech and language assessment, battle sign, raccoon eyes, posturing, pupils, extraocular movements, rhinorrhea, otorrhea, gait, skull symmetry)
- Palpation (e.g., skin temperature, spinal column tenderness)
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., Glasgow Coma Scale, stroke assessment tool, blood glucose, limb movement and sensation, neurovascular status, vital signs, weight, Broselow tape, fontanelles)

4.1c Diagnostic results (e.g., cerebral spinal fluid, hematology, chemistry, coagulation studies, ECG, cultures, toxicology, diagnostic imaging)

4.2 Selects nursing interventions to appropriately manage the following alterations in neurological function:

4.2a seizure activity, *status epilepticus*, febrile seizures

4.2b meningitis/encephalitis

4.2c transient ischemic attack (TIA)/acute ischemic/hemorrhagic stroke

4.2d spinal cord/vertebral injury or anomalies (e.g., cauda equina)

4.2e spinal shock/neurogenic shock

4.2f increased intracranial pressure (e.g., space-occupying lesions, epidural, subdural, subarachnoid hemorrhage, cerebral edema, hydrocephalus)

4.2g head injury (e.g., blunt and penetrating injury, contusion, traumatic brain injury [i.e., concussion], diffuse axonal injury, abusive head trauma [i.e., shaken baby syndrome])

4.2h headaches (e.g., migraine, tension, sinus)

4.2i organic brain syndrome (e.g., dementia, Alzheimer's disease)

4.2j acute confusional state (e.g., delirium)

4.2k progressive neurological disorders (e.g., ALS, Guillain-Barré syndrome)

Examples
The following are examples of potential nursing interventions to appropriately manage alterations in neurological function:

- Maintain adequate cerebral perfusion (e.g., head midline, elevate head of the bed, adequate oxygenation, prevent hypercarbia/hypocarbia, maintain adequate blood pressure/mean arterial pressure [MAP])
- Initiate isolation precautions as indicated
- Monitor fluid balance (i.e., input and output)
- Monitor and reassess neurological status, neurovascular status and vital signs

4.3 Selects nursing interventions related to pharmacological agents in the neurological system (e.g., oxygen, anticonvulsants, diuretics, barbiturates, thrombolytics/fibrinolytics, analgesics, sedatives, neuromuscular blocking agents, reversal agents)

5. Multi-System Trauma

The emergency nurse…

5.1 Interprets the following data related to multi-system trauma:

5.1a Subjective assessment

- Presenting complaint
- History (e.g., pre-hospital care, pre-hospital information, client-generated information, precipitating events, past medical history)
- Mechanism of injury (e.g., mechanical energy, thermal energy, chemical energy, electrical energy, radiant energy, oxygen deprivation)
- Manifestations (e.g., life- and/or limb-threatening injuries, blood loss, loss of consciousness, paresthesia)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

5.1b Objective assessment

- Primary survey (i.e., control catastrophic hemorrhage, airway with c-spine precautions, breathing, circulation, disability and expose/environmental controls [C-ABCDE])
- Secondary survey (i.e., full set of vital signs, family presence, resuscitation adjuncts, comfort measures, history, head-to-toe assessment, inspect posterior surfaces)
- Other physical assessments related to presenting illness or injury (e.g., weight, Broselow tape, burn percentage and degree)

5.1c Diagnostic results appropriate for involved systems (e.g., blood type and screen, crossmatch, blood gases, hematology, chemistry, urinalysis, coagulation studies, toxicology, carboxyhaemoglobin, myoglobin, point of care ultrasound [POCUS], diagnostic imaging)

5.2 Selects nursing interventions to appropriately manage multi-system trauma resulting from the following mechanisms of injury:

5.2a burn trauma (i.e., thermal, chemical, radiant, electrical)

5.2b blast injuries (e.g., explosions)

5.2c blunt trauma (e.g., vehicular impact, falls, assaults)

5.2d penetrating trauma (e.g., knife, gunshot, impaled)

Examples
The following are examples of potential nursing interventions to appropriately manage alterations in multi-system trauma:
Airway/Breathing

- Initiate and maintain oxygenation, ventilation
- Initiate and/or maintain appropriate spinal immobilizations (e.g., size-appropriate: c-collar, head block)
- Perform airway techniques (e.g., jaw thrust, oral and nasal airways, suctioning, bag-valve-mask)
- Assist with endotracheal intubation with rapid sequence induction (RSI)
- Assist with decompression of the chest (e.g., chest tube, finger thoracostomy, needle decompression)

Circulation

- Initiate vascular access
- Assist with insertion of intraosseous (IO)/central lines
- Initiate and maintain fluid resuscitation (e.g., crystalloids, blood products, massive hemorrhage protocol)
- Monitor and reassess vital signs
- Monitor fluid balance (i.e., input and output)
- Obtain blood type, screen and crossmatch, blood gas and lactate
- Control external bleeding, tourniquets, pelvic binder

Disability

- Monitor and reassess neurological status (e.g., level of consciousness, Glasgow Coma Scale, blood glucose, pupil reaction)

Expose/Environmental controls

- Remove clothing
- Maintain normothermic environment/prevent iatrogenic hypothermia (e.g., warm fluid/blankets/environment/lights)

5.3 Selects nursing interventions related to pharmacological agents utilized in multi-system trauma (e.g., oxygen, tranexamic acid [TXA], anesthetics, analgesics, sedatives, paralytics, inotropes, antibiotics, immunizations, cyanide poisoning kit)

6. Maxillofacial, Eye, Ear, Nose and Throat (EENT)

The emergency nurse…

6.1 Interprets the following data related to the maxillofacial, EENT:

6.1a Subjective assessment
- Presenting complaint
- History (e.g., onset and risk factors, past medical history)
- Manifestations (e.g., sensory changes, motor changes, tinnitus, dysphagia, changes in phonation, swelling, bleeding/drainage)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

6.1b Objective assessment
- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., skin colour, symmetry, skin integrity, motor movement, malocclusion, trismus, bleeding/drainage, foreign bodies, visual acuity)
- Palpation (e.g., crepitus, deformities)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, ocular pH, weight, Broselow tape)

6.1c Diagnostic results (e.g., hematology, chemistry, coagulation studies, diagnostic imaging)

6.2 Selects nursing interventions associated with the following alterations in maxillofacial, EENT function:

6.2a foreign body

6.2b chemical exposure (e.g., ocular, oral pharyngeal)

6.2c ocular injuries/disease (e.g., corneal abrasion, conjunctivitis, iritis, retinal detachment, ruptured globe injury, hyphema, subconjunctival hemorrhage, acute glaucoma)

6.2d ear injuries/disease (e.g., Ménière's disease, otitis externa/media, mastoiditis, ruptured tympanic membrane)

6.2e epistaxis (i.e., anterior or posterior)

6.2f oropharyngeal injuries, abscesses or inflammation (e.g., epiglottitis, angioedema, peritonsillar abscesses, retropharyngeal abscesses, stomatitis, pharyngitis, tonsillitis, post-tonsillectomy bleed, pharyngeal trauma)

6.2g fractures (e.g., LeFort I, II, III, orbital, nasal, oral)

6.2h maxillofacial injuries/disease (e.g., dislocation/temporomandibular joint syndrome, trigeminal neuralgia, Bell's palsy, dental avulsion)

Examples
The following are examples of potential nursing interventions to appropriately manage maxillofacial and EENT alterations:

- Position the client as appropriate for the disease or injury (e.g., semi/high-Fowler's)
- Perform airway techniques (e.g., oral and nasal airways, suctioning)
- Irrigate the eye (e.g., Morgan lens)
- Assist with nasal packing and insertion of balloon catheters or tampons
- Assist with foreign body removal
- Assist with incision and drainage of abscesses (e.g., peritonsillar abscesses)
- Assist with reimplantation of teeth/care of displaced, broken or loose teeth
- Monitor and reassess airway status and vital signs including pulse oximetry

6.3 Selects nursing interventions related to pharmacological agents utilized in maxillofacial and EENT conditions (e.g., oxygen, topical anesthetics, antibiotics, analgesics, antipyretics, immunizations)

7. Gastrointestinal

The emergency nurse…

7.1 Interprets the following data related to the gastrointestinal system:

7.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, risk factors, past medical history, recent travel)
- Manifestations (e.g., nausea, vomiting, food/fluid tolerance, diarrhea, constipation, bleeding, melena, coffee-ground emesis)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

7.1b Objective assessment

- Degree of distress (e.g., mild, moderate, severe)
- Inspection (e.g., skin colour, diaphoresis, posturing, splinting abdomen, mucous membranes, production of tears, bruising [e.g., Cullen's, Grey-Turner's and seatbelt signs])
- Auscultation (e.g., bowel sounds, aortic bruits)
- Percussion
- Palpation (e.g., masses, guarding, skin turgor, pain, rebound tenderness, Murphy's and McBurney's signs)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, weight, Broselow tape, fontanelles)

7.1c Diagnostic results (e.g., hematology, chemistry, toxicology, coagulation studies, blood type and screen, crossmatch, ECG, pregnancy test, urinalysis, osmolality, cultures, occult blood, liver function tests, point of care ultrasound [POCUS], diagnostic imaging)

7.2 Selects nursing interventions associated with the following alterations in the gastrointestinal system:

7.2a hernia/ischemic/infarcted bowel or obstructed bowel (e.g., partial or complete, paralytic ileus)

7.2b peritonitis/non-traumatic perforation

7.2c GI bleed (e.g., esophageal varices, ulcer, upper/lower bleed)

7.2d pancreatitis, hepatic encephalopathy

7.2e foreign bodies

7.2f cholecystitis/cholelithiasis

7.2g appendicitis

7.2h pyloric stenosis, intussusception

7.2i ulcerative colitis, Crohn's disease, gastroenteritis, diverticulitis, gastritis, esophagitis

7.2j abdominal injury (e.g., splenic rupture, liver laceration, perforated viscous, diaphragmatic rupture)

7.2k anorectal conditions (e.g., fistula, hemorrhoids, trauma, abscess/cysts, prolapse)

7.2l constipation/diarrhea

7.2m GI alterations including medical devices (e.g., ostomy, feeding tubes, drains)

Example
The following are examples of potential nursing interventions to appropriately manage alterations in the gastrointestinal system:

- Monitor and reassess ABCDE and vital signs
- Prepare for procedures (e.g., paracentesis, endoscopy, foreign body removal, surgical intervention)
- Insert and monitor naso/orogastric tube
- Initiate IV access and manage IV therapy (e.g., colloids, blood products, crystalloids)
- Observe fluid losses and monitor fluid balance (e.g., intake and output)
- Initiate isolation precautions as indicated

7.3 Selects nursing interventions related to pharmacological agents in the gastrointestinal system (e.g., oxygen, antibiotics, analgesics, sedatives, antiemetics, enemas, laxatives, H2 antagonists, contrast medications)

8. Genitourinary

The emergency nurse…

8.1 Interprets the following data related to the genitourinary system:

8.1a Subjective assessment
- Presenting complaint
- History (e.g., onset, risk factors, past medical history, sexual history, gender identity)
- Manifestations (e.g., nausea, vomiting, hematuria, dysuria, discharge)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

8.1b Objective assessment
- Degree of distress (e.g., mild, moderate, severe)
- Inspection (e.g., skin colour, hematuria, perineal swelling, diaphoresis)
- Palpation
- Percussion (e.g., bladder, costovertebral angle)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, bladder scan, weight, Broselow tape, fontanelles)

8.1c Diagnostic results (e.g., urinalysis, hematology, chemistry, coagulation studies, urea, creatinine, cultures, sexually transmitted infection [STI] testing, diagnostic imaging)

8.2 Selects nursing interventions associated with the following alterations in genitourinary system:

8.2a infection (e.g., urinary tract infection [UTI], glomerulonephritis, pyelonephritis, prostatitis, cystitis, epididymitis, orchitis)

8.2b renal colic

8.2c renal failure (e.g., acute, chronic, dialysis dependant)

8.2d sexually transmitted infection (STI)

8.2e priapism, testicular torsion, phimosis, paraphimosis

8.2f urethral/genital injury

8.2g urinary retention or obstruction, foreign bodies

Example
The following are examples of potential nursing interventions to appropriately manage alterations in genitourinary functions:
- Assist with/perform urinary catheterization (e.g., suprapubic, urethral, continuous bladder irrigation [CBI])
- Assist with obtaining culture samples
- Monitor fluid balance (i.e., input and output)
- Strain urine (e.g., calculi)

8.3 Selects nursing interventions related to pharmacological agents in the genitourinary system (e.g., diuretics, analgesics, antibiotics, topical agents, antipyretics, antivirals, antiemetics)

9. Obstetrical Client and Female Reproductive System

The emergency nurse…

9.1 Interprets the following data related to the obstetrical client and female reproductive system:

9.1a Subjective assessment
- Presenting complaint
- History (e.g., onset, risk factors, last normal menstrual period, past medical history, gynecological surgeries, STIs, contraception, substance use history)
  - Obstetrical (e.g., expected date of birth, gravida/para/abortions, frequency and duration of contractions, multiple gestation, meconium in fluid, recent drug ingestion, recent abdominal trauma, rupture of membranes, prenatal care, previous cesarean birth, Streptococcus B)
- Manifestations (e.g., discharge, bleeding, nausea, vomiting, changes in fetal movement, headache, blurred vision)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

9.1b Objective assessment
- Degree of distress (e.g., mild, moderate, severe)
- Inspection (e.g., skin colour, diaphoresis, splinting of abdomen, vaginal bleeding, vaginal discharge)
- Palpation (e.g., fundal height, fetal movement, contractions, breasts)
- Auscultation (e.g., fetal heart rate)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, weight)

9.1c Diagnostic results (e.g., pregnancy test, urine protein and glucose, Rh factor, blood type and screen, hematology, chemistry, coagulation studies, STI testing, toxicology, liver function test, point of care ultrasound [POCUS], diagnostic imaging)

9.2 Selects nursing interventions associated with the following alterations in the obstetrical client and female reproductive system:

9.2a ectopic pregnancy, ovarian torsion, ovarian cyst

9.2b abortion (i.e., spontaneous, threatened, therapeutic, septic, missed)

9.2c pregnancy-induced hypertension, preeclampsia/eclampsia, hemolysis, elevated liver enzymes and low platelets (HELLP syndrome), hyperemesis gravidarum, gestational diabetes

9.2d abruptio placentae, placenta previa (e.g., amniotic fluid embolism, DIC), uterine rupture, delivery, retained products

9.2e foreign bodies, perineal trauma

9.2f infection (e.g., mastitis, perineum, STI, pelvic inflammatory disease, toxic shock syndrome)

9.2g postpartum hemorrhage

9.2h emergency childbirth (e.g., unexpected delivery, precipitous delivery, cord prolapse, meconium-stained amniotic fluid, breech birth)

9.2i postpartum mental health (e.g., psychosis, depression, blues)

Examples
The following are examples of potential nursing interventions to appropriately manage alterations in the obstetrical client and female reproductive system:

- Monitor and reassess ABCDE and vital signs of mother and neonate
- Position the client (left lateral decubitus)
- Monitor and reassess for signs of fetal distress (e.g., fetal heart rate, fetal activity, meconium)
- Assist with childbirth and delivery of placenta
- Obtain blood type, screen and crossmatch
- Initiate IV access and manage IV therapy (e.g., blood products, crystalloids)
- Observe fluid losses and monitor fluid balance (i.e., intake and output)
- Assist with care and monitoring of the neonate and mother (e.g., APGAR score)
- Prepare for timely surgical intervention, transfer or referral (e.g., social work, substance support/detox, specialists, primary care)
- Prepare for speculum examination

9.3 Selects nursing intervention related to pharmacological agents in the obstetrical client and female reproductive system (e.g., magnesium sulfate, anticonvulsants, methotrexate, oxytocin, analgesics, antibiotics, antiemetics, Rh immune globulin, emergency contraception)

10. Musculoskeletal/Integumentary

The emergency nurse…

10.1 Interprets the following data related to the musculoskeletal/integumentary system:

10.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, risk factors, mechanism of injury, past medical history)
- Manifestations (e.g., sensation, movement, skin temperature, swelling)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

10.1b Objective assessment

- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., skin colour, symmetry, skin integrity, rash, burns, bruising, contusion, deformity, neurovascular assessment, range of motion, inability to use limb/weight bear, blisters)
- Palpation (e.g., temperature, pallor, pulses, paralysis, paresthesia)
- Other physical assessments (e.g., vital signs, weight, Broselow tape)

10.1c Diagnostic results (e.g., myoglobin, uric acid, CK, hematology, chemistry, coagulation studies, sedimentation rate, C-reactive protein, point of care ultrasound [POCUS], diagnostic imaging)

10.2 Selects nursing interventions associated with the following alterations in the musculoskeletal/integumentary system:

10.2a compartment syndrome, neurovascular compromise

10.2b penetrating injury

10.2c soft tissue injuries (e.g., sprains and strains)

10.2d acute or exacerbated chronic inflammatory states (e.g., osteoarthritis, gout)

10.2e infectious processes (e.g., necrotizing fasciitis, septic joint, osteomyelitis, abscesses, cellulitis)

10.2f skin disorders (e.g., psoriasis, hives, erythema, rashes, ulcerations, eczema)

10.2g fractures, dislocations, amputations, crush injuries

10.2h degloving, avulsions, lacerations, bites, abrasions, foreign body

Examples
The following are examples of potential nursing interventions to appropriately manage alterations in the musculoskeletal/integumentary system:

- Assess and monitor ABCDE and vital signs
- Assess and monitor neurovascular status
- Assist with suturing, gluing, stapling
- Apply topical anesthetic
- Assist with local anesthetic
- Assist with the reduction and immobilization of fractures/dislocations
- Care of the amputated part
- Assist and monitor procedural sedation
- Initiate IV access and manage IV therapy (e.g., blood products, crystalloids)
- Observe fluid losses and monitor fluid balance (i.e., intake and output)
- Prepare for operating room
- Prepare for fasciotomy
- Remove wound debris and cleanse wound (e.g., debridement, irrigation)
- Remove ring(s)

10.3 Selects nursing interventions related to pharmacological agents in the musculoskeletal/integumentary system (e.g., oxygen, antibiotics, analgesics, sedatives, local and topical anesthetic, antihistamines, steroids, immunizations, antiemetics, antivirals, antifungals)

11. Environmental Emergencies

The emergency nurse…

11.1 Interprets the following data related to environmental emergencies:

11.1a Subjective assessment
- Presenting complaint
- History (e.g., onset, risk factors, type/length of exposure, past medical history, exposure source/route, interventions at scene)
- Manifestations (e.g., shortness of breath, cramps, syncope, fatigue, dizziness, confusion, agitation, cough, fever)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

11.1b Objective assessment
- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., skin colour, capillary refill, rash, mucous membranes, skin integrity, diaphoresis, level of consciousness, work of breathing)
- Palpation (e.g., pallor, pulses, paralysis, paresthesia, temperature, skin turgor)
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, Glasgow Coma Scale, weight, Broselow tape)

11.1c Diagnostic results (e.g., hematology, chemistry, coagulation, creatinine, urea, toxicology, myoglobin, blood gases, lactate, urinalysis, ECG, diagnostic imaging)

11.2 Selects nursing interventions associated with the following to appropriately manage environmental injuries:

11.2a heat syndromes (e.g., heat syncope, heat exhaustion, heat stroke)

11.2b cold syndromes (e.g., frostbite, hypothermia)

11.2c submersion injuries (i.e., near drowning)

11.2d high altitude illness, decompression illness

11.2e bites and stings from humans, animals, arthropods (e.g., insects, spiders, ticks)

11.2f noxious exposure (e.g., carbon monoxide)

Examples
The following are examples of potential nursing interventions to appropriately manage environmental injuries:
- Monitor and reassess ABCDE and vital signs
- Assist with intubation
- Remove source, flush as required
- Initiate warming or cooling measures
- Initiate cardiac monitoring
- Initiate IV access and manage IV therapy (e.g., blood products, crystalloids)
- Observe fluid losses and monitor fluid balance (i.e., intake and output)

11.3 Selects nursing interventions related to pharmacological agents for environmental injuries (e.g., oxygen, antivenom kits, antipyretics, analgesics, immunizations, rabies vaccine, antibiotics, diuretics, epinephrine, antihistamine)

12. Immunology/Hematology/Endocrinology

The emergency nurse…

12.1 Interprets the following data related to the immunologic/hematological/endocrine systems:

12.1a Subjective assessment
- Presenting complaint
- History (e.g., onset, risk factors, past medical history)
- Manifestations (e.g., diaphoretic, nausea, vomiting, fatigue, mental status changes, altered level of consciousness, swelling, weight loss/gain, shortness of breath, increased thirst, fever)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

12.1b Objective assessment
- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., diaphoresis, respiratory rate, work of breathing, mucous membranes)
- Palpation (e.g., skin turgor, capillary refill)
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments (e.g., vital signs, odour, weight, Broselow tape)

12.1c Diagnostic results (e.g., urine/serum ketones, blood glucose, serum calcium/magnesium/phosphate, blood gases, hematology, chemistry, coagulation studies, blood type and screen, crossmatch, thyroid studies, osmolality, anion gap, diagnostic imaging)

12.2 Selects nursing interventions associated with the following alterations in immunologic/hematological/endocrine functions:

12.2a hyperglycemic emergencies (e.g., diabetic ketoacidosis [DKA], hyperglycemic hyperosmolar nonketotic state [HHNS])

12.2b hypoglycemia

12.2c thyroid emergencies (e.g., thyroid storm, myxedema coma)

12.2d adrenal gland emergencies (e.g., Addisonian crisis, Cushing's syndrome, syndrome of inappropriate antidiuretic hormone [SIADH], diabetes insipidus [DI])

12.2e blood dyscrasias (e.g., DIC, sickle cell crisis, hemophilia)

12.2f oncological emergencies (e.g., spinal cord compression syndrome, malignant effusions [pleural, pericardial, peritoneal], hypercalcemia)

12.2g immunocompromised client (e.g., HIV/AIDS, febrile neutropenia, asplenia)

Examples

The following are examples of potential nursing interventions to appropriately manage alterations in immunologic/hematological/endocrine systems:

- Monitor and reassess ABCDE and vital signs
- Monitor capillary/serum glucose levels, electrolytes, blood gases, osmolality
- Identify clients with bleeding disorders requiring rapid factor replacement
- Initiate IV access and manage IV therapy (e.g., blood products, crystalloids)
- Observe fluid losses and monitor fluid balance (i.e., intake and output)
- Initiate isolation and cytotoxic precautions as indicated

12.3 Selects nursing interventions related to pharmacological agents for the immunologic/hematological/endocrine systems (e.g., oxygen, hypoglycemic agent, insulin, electrolytes, dextrose, anticoagulants, analgesics, glucocorticoids, diuretics, thyroid therapy, hormones, anticoagulant reversal agents)

13. Relationship Violence/Sexual Assault

The emergency nurse…

13.1 Interprets the following data related to relationship violence/sexual assault:

13.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, type [physical, verbal, financial, emotional, sexual], past medical history, mechanism of injury, safety of self and children, suicidal ideation, history of depression, substance use, post-traumatic stress)
- Manifestations (e.g., non-specific complaints of pain, delays in presentations, partner answering for client, frequency of injuries, flat affect, poor eye contact)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

13.1b Objective assessment

- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., lacerations, bruises in multiple stages of healing, injuries inconsistent with history or stages of development, bite marks, burns)
- Palpation
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, Glasgow Coma Scale, weight, Broselow tape)

13.1c Diagnostic results (e.g., hematology, chemistry, toxicology, coagulation studies, pregnancy test, diagnostic imaging)

13.2 Selects nursing interventions associated with the following:

13.2a child abuse (e.g., neglect, physical, verbal, emotional, sexual)

13.2b intimate partner violence (e.g., physical, verbal, financial, emotional, sexual)

13.2c older/dependant adult abuse (e.g., neglect, physical, verbal, financial, emotional, sexual)

13.2d human trafficking

13.2e bullying/workplace violence

13.2f sexual assault

Examples
The following are examples of potential nursing interventions to appropriately manage relationship violence and sexual assault:

- Screen for relationship violence and assault using a direct, kind, non-judgmental approach to create a trusting therapeutic relationship
- Maintain a high index of suspicion (e.g., risk factors for violence, red flags)
- Isolate and provide client safety/confidentiality
- Document findings (e.g., direct quotes, size, shape, colour of bruises)
- Preserve forensic evidence and maintain chain of custody
- Screen and treat for communicable diseases
- Review options for safety/maintain safety for client, nurse and others (e.g., suicidal ideation, risk factors for abuse)
- Provide referrals and education (e.g., community resources, sexual assault team, support groups, shelters, social worker, child/adult protection team, coping strategies, parenting skills)
- Mandatory reporting

13.3 Selects nursing interventions related to pharmacological agents for relationship violence and sexual assault clients (e.g., antibiotics, emergency contraception, HIV/hepatitis prophylaxis, immunizations, antiemetics, analgesics, anxiolytics)

14. Toxicology/Substance Use

The emergency nurse…

14.1 Interprets the following data related to toxicological emergencies:

14.1a Subjective assessment

- Presenting complaint
- History (e.g., onset, risk factors, exposure, time, amount, route, intentional versus unintentional, past medical history, substance use)
- Manifestations (e.g., altered levels of consciousness, shortness of breath, cough, fatigue, vomiting, fever, seizures)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

14.1b Objective assessment

- Behaviours (i.e., chronic or acute change; e.g., agitation, bizarre behaviour)
- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., toxidrome indicators [e.g., pupils, skin diaphoresis, skin temperature], work of breathing, skin colour, evidence of poisoning, capillary refill)
- Palpation (e.g., skin temperature)
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, Glasgow Coma Scale, weight, Broselow tape)

14.1c Diagnostic results (e.g., serum and urine toxicology screens, ECG, cardiac monitoring, blood glucose, blood gases, osmolality, anion gap, chemistry, hematology, coagulation studies, liver function tests [LFTs], renal function, carboxyhaemoglobin, methemoglobin, diagnostic imaging)

14.2 Selects nursing interventions associated with the following toxicological emergencies:

14.2a toxic exposure (e.g., environmental, chemical)

14.2b poisonings and substance use (e.g., alcohol, tobacco, cannabinoids, recreational drugs, prescription drugs, predatorial drugs [e.g., Rohypnol, GHB], inhalants [e.g., glue, cleaners, hairspray])

14.2c substance withdrawal (e.g., alcohol, opioids, benzodiazepines)

Example
The following are examples of potential nursing interventions to appropriately manage toxicological emergencies:

- Utilize risk screening for substance use/withdrawal
- Monitor and reassess ABCDE and vital signs
- Access available resources in a timely manner (e.g., poison information centre, WHMIS)
- Initiate cardiac monitoring
- Recognize toxidromes
- Administer measures to decrease absorption of toxin (e.g., alkalinization, charcoal, ethanol infusions)
- Ensure safety of environment (e.g., chemical, biological, radiological, nuclear, explosive [CBRNE] exposure, potential for violence/aggressive behaviour)
- Initiate IV access and manage IV therapy (e.g., blood products, crystalloids)
- Observe fluid losses and monitor fluid balance (i.e., intake and output)
- Initiate isolation precautions as indicated
- Provide referrals (e.g., social work, detoxification/withdrawal program, mental health, substance use program)
- Facilitate harm reduction (e.g., naloxone kit, needle exchange)
- Refrain from judging, labelling, demeaning, stigmatizing or humiliating clients who use substances

14.3 Selects nursing interventions related to pharmacological agents for toxicological emergencies (e.g., charcoal, antidotes [e.g., naloxone, vitamin K], sodium bicarbonate, thiamine, N-acetylcysteine, dextrose, antiemetics, sedatives, anticonvulsants, osmotic diuretic, paralytics)

15. Mental Health

The emergency nurse…

15.1 Interprets the following data related to mental health issues including:

15.1a Subjective assessment
- Presenting complaint
- History (e.g., onset, risk factors, suicidal ideation, homicidal ideation, past medical history, substance use, medication history and compliance)
- Manifestations (e.g., mood, affect, agitation, behaviour, cognition and thought processes, changes in speech pattern, changes in gait)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

15.1b Objective assessment
- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., hygiene/personal appearance, skin colour, motor restlessness)
- Mental status (e.g., orientation, changes in behaviour or thought process, hallucinations, delusions, changes in perception, judgment)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, Glasgow Coma Scale, weight)

15.1c Diagnostic results (e.g., chemistry, hematology, toxicology, urinalysis, osmolality, therapeutic drug levels, thyroid function, blood glucose, diagnostic imaging)

15.2 Selects nursing interventions associated with the following alterations in mental health:

15.2a mood, anxiety and stress disorders (e.g., depression, bipolar, panic attacks, anxiety states, post-traumatic stress, situational crisis)

15.2b psychotic disorders (e.g., schizophrenia, postpartum psychosis)

15.2c eating disorders (e.g., anorexia, bulimia)

15.2d pediatric behavioural emergencies

15.2e personality disorders (e.g., borderline, antisocial)

Examples
The following are examples of potential nursing interventions to appropriately manage alterations in mental health:
- Provide a quiet environment
- Ensure safety of client, staff and environment (e.g., least restraint principles, voluntary/involuntary status)
- Monitor and reassess ABCDE and vital signs
- Perform a suicide risk assessment
- Access resources (e.g., community mental health, social worker, crisis worker, psychiatrist, security, police)
- Initiate de-escalation of behaviour as required
- Initiate continuous observation as required
- Initiate isolation precautions as indicated

15.3 Selects nursing interventions related to pharmacological agents for mental health (e.g., sedatives, antipsychotics, anxiolytics, antidepressants, benztropine)

16. Infectious Disease

The emergency nurse…

16.1 Interprets the following data related to infectious diseases:

16.1a Subjective assessment
- Presenting complaint
- History (e.g., onset, risk factors, exposure, recent travel, past medical history, immunization status)
- Manifestations (e.g., rash, altered level of consciousness, shortness of breath, cough, fatigue, vomiting, agitation, seizures, fever, diarrhea)
- Pain (e.g., provoking factors, quality, region and radiation, symptoms and severity, timing and treatment [PQRST], age- and language-appropriate scale)

16.1b Objective assessment
- Degree of distress (i.e., mild, moderate, severe)
- Inspection (e.g., rash, petechiae, purpura, work of breathing, skin colour, diaphoresis, capillary refill)
- Palpation (e.g., skin temperature)
- Auscultation (e.g., heart sounds, breath sounds)
- Other physical assessments related to presenting illness or injury (e.g., vital signs, Glasgow Coma Scale, weight, Broselow tape)

16.1c Diagnostic results (e.g., cerebral spinal fluid, blood glucose, blood gases, chemistry, hematology, coagulation studies, liver function tests [LFTs], creatinine, cultures, parasitology, virology, diagnostic imaging)

16.2 Selects nursing interventions associated with the following infectious diseases and processes:

16.2a emerging infectious diseases (e.g., Ebola, vaccine-preventable diseases

16.2b antibiotic-resistant organisms (e.g., MRSA, VRE)

16.2c communicable infections (e.g., influenza-like illness [ILI], TB)

16.2d non-communicable infections (e.g., Lyme disease, malaria)

Examples
The following are examples of potential nursing interventions to appropriately manage infectious diseases:
- Monitor current health advisories
- Early recognition (e.g., fever, cough, travelling, red flags)
- Initiate appropriate isolation
- Follow routine practices
- Use personal protective equipment
- Comply with mandatory reporting
- Provide symptomatic support and treatment

16.3 Selects nursing interventions related to pharmacological agents for infectious diseases (e.g., antibiotics, antivirals, antifungals, antimalarials, antipyretics, immunizations)

17. Psychosocial

The emergency nurse…

17.1 Interprets data related to the client's psychosocial needs including experience with the health crisis, coping skills, perceived vulnerability, response to the health-care system, current and past experiences (e.g., intergenerational trauma, adverse childhood experiences), support systems, and cultural, religious and spiritual values and beliefs

17.2 Selects nursing interventions related to the psychosocial management of grief/loss, pain, anxiety, stress, distress and uncertainty (e.g., therapeutic communication, complementary therapies, family support/involvement, relaxation techniques, spiritual and cultural needs)

Examples
The following are examples of potential nursing interventions to advocate for and appropriately manage the psychosocial needs of the client and family:

- Provide effective and timely communication to the client and family
- Provide appropriate support for family who wish to be present during crisis situations (e.g., cardiac arrest, trauma resuscitation)
- Ensure that the environment promotes privacy and support
- Provide comfort measures (e.g., positioning, warm blankets, visualization)
- Provide referral to appropriate support resources (e.g., interpreters, pastoral services, age-specific resources)
- Provide appropriate support for client and family in decision-making (e.g., do not resuscitate, organ/tissue donation, sexual assault, notification of police, abuse)

18. Discharge Planning/Client Education

The emergency nurse…

18.1 Identifies priorities for discharge planning and client education considering the following:
- time
- resources
- environment
- referrals

18.2 Selects nursing interventions for discharge planning and client education considering:
- community resources
- cognitive functioning (age/growth and development appropriate)
- support systems
- socioeconomic status
- physical limitations, safety
- cultural/spiritual beliefs
- coping strategies
- health promotion and injury prevention
- language and literacy levels
- available resources (e.g., verbal and written instructions, demonstrations)
- readiness for change (e.g., substance use)

19. Professional Practice Issues/Legal and Ethical Issues

The emergency nurse…

19.1 Follows legislation, standards of practice, code of ethics, policies and procedures as related to the practice of nursing:
- Mental Health Act
- informed consent, capacity assessment
- advance directives (e.g., power of attorney, living will, substitute decision maker, goals of care/code status)
- medical assistance in dying
- medical examiner/coroner
- police requests, preservation and collection of evidence
- mandatory reporting (e.g., gunshot wounds, notifiable diseases, abuse)
- organ/tissue donation
- family presence during resuscitation/invasive procedures
- unidentified client
- self-identifies any ethical and moral biases

20. Psychological Safety

The emergency nurse…

20.1 Recognizes that work stress, workload and work–life issues (e.g., violence, traumatic events, overcapacity, compassion fatigue, shift work) can have a negative impact on their physical and mental health (e.g., musculoskeletal injuries, substance use, depression, anxiety, PTSD, decreased job satisfaction)

20.2 Participates in activities to mitigate harm, such as:

- building resilience (e.g., self-care, mindfulness, self-compassion)
- health and wellness activities (e.g., physical activity, sleep hygiene)
- reflective practice
- critical incident stress management/debriefing
- respectful collaboration/supportive environment
- reporting unsafe working situations
- education on management of aggressive/violent behaviours

21. Disaster/Emergency Preparedness

The emergency nurse…

21.1 Recognizes situations when the number of incoming clients exceeds the resources of the Emergency Department during the following:

- mass casualty incident
- chemical, biological, radiological, nuclear and explosive (CBRNE) exposure
- natural disaster (e.g., flood, fire, earthquake, tornado, hurricane, blizzard)
- pandemic
- emergency codes (e.g., bomb threat, active shooter, hostage situation)

21.2 Selects nursing interventions associated with disaster preparedness:

21.2a communicates and collaborates with the team to activate the emergency plan (e.g., code orange, pandemic response)

21.2b ensures safety of the environment (e.g., chemical, biological, radiological, nuclear and explosive [CBRNE] exposure)

21.2c triages multiple casualties according to disaster triage principles (i.e., greatest good for the greatest number)