

Exam Blueprint and Specialty Competencies

Introduction – Blueprint for the Perinatal Nursing Certification Exam

The primary function of the blueprint for the CNA Perinatal 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 perinatal 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 perinatal 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 Perinatal 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 Perinatal Nursing Certification Exam, the content consists of the competencies of a fully competent practising perinatal 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 updated and approved by the Perinatal Nursing Certification Exam Committee.

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).

Assumptions

In developing the set of competencies for perinatal nurses, the following assumptions, based on current national standards for nursing practice, were made:

Perinatal Nursing Environment

- The five domains of practice (clinical care, education, administration, research and policy) are integrated throughout perinatal nursing.
- Perinatal nursing includes practice throughout the childbearing continuum (from preconception to 3 months after birth).
- The focus of perinatal care is to promote and advocate for the safety and well-being of the childbearing person, the family and the fetus/newborn.
- Perinatal nurses work with childbearing person(s) and their families in diverse and complex environments, including hospital, home, community and ambulatory care settings.

Health

- Childbearing is a dynamic and transformational biological, psychological, social and spiritual process.
- The childbearing continuum is influenced by determinants of health.
- The childbearing person's and family's health is defined within the context of their value system which is influenced by ethnicity, culture, socio-economic status and spiritual beliefs.

Person and Family

- The childbearing person includes individuals who may be contemplating or experiencing pregnancy, labour and birth and/or the postpartum period.
- The family is defined by the childbearing person and includes those people who are significant to the childbearing person.
- The relationship between the childbearing person, the family and the perinatal nurse is based on mutual respect and trust.
- The childbearing person and the family engage with the perinatal nurse and other health-care professionals to create and implement a plan of care that reflects their self-identified needs.

Perinatal Nursing Practice

- Perinatal nursing practice includes therapeutic care, health surveillance, health promotion and illness prevention, shared decision-making and collaboration.
- The perinatal nurse who is eligible for certification is a registered nurse who practises in accordance with Professional registration/licensure and the Code of Ethics (Canadian Nurses Association, 2014).
- The perinatal nurse practises in accordance with the Standards for Perinatal Nursing Practice and Certification in Canada, Second Edition (2009).
- The perinatal nurse has a collaborative leadership role in promoting the health of childbearing persons and their families throughout the perinatal continuum.
- The perinatal nurse honours childbearing as a unique and life-altering experience and respects the diversity of meanings attached to these experiences.

Competency Categories

The competencies are classified under a five-category scheme commonly used to organize perinatal nursing.

Some of the competencies lend themselves to one or more of the categories; therefore, these five 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 Perinatal 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
Preconception	5-10%
Antenatal	15-25%
Labour and Birth	30-40%
Postpartum	15-25%
Newborn and Infant Care	15-20%

Technical Specifications

In addition to the specifications related to the competencies, other variables are considered during the development of the Perinatal 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., patient culture, patient 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 patient's health-care situation). Independent questions stand alone. In the Perinatal Nursing Certification Exam, 55 to 65 per cent of the questions are presented as independent questions and 35 to 45 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 Perinatal Nursing Certification Exam is aimed at one of three levels: knowledge/comprehension, application and critical thinking.²

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 patient'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 patients (e.g., applying nursing principles to the care of patients).

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

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 perinatal 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 patients.

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 Perinatal Nursing Exam
Knowledge/Comprehension	10-20%
Application	45-55%
Critical Thinking	30-40%

Contextual Variables

Patient Culture: Questions measuring awareness, sensitivity, and respect for different cultural values, beliefs, and practices, without introducing stereotypes, are included on the exam.

Patient Health Situation: In the development of the Perinatal Nursing Exam, the childbearing person and family are viewed holistically.

Health-Care Environment: It is recognized that perinatal nursing is practised in a variety of settings. The health-care environment is specified only where it is required for clarity or in order to provide guidance to the candidate.

Conclusions

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

Perinatal 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

Perinatal Nursing Exam Development Guidelines

STRUCTURAL VARIABLES	
Exam Length and Format	approximately 165 multiple-choice questions
Question Presentation	55-65% independent questions 35-45% case-based questions
Cognitive Ability Levels of Questions	Knowledge 10-20% of questions Application 45-55% of questions Critical thinking 30-40% of questions
Competency Categories	Preconception 5-10% of questions Antenatal 15-25% of questions Labour and Birth 30-40% of questions Postpartum 15-25% of questions Newborn and Infant Care 15-20% of questions
CONTEXTUAL VARIABLES	
Culture	Questions measuring awareness, sensitivity, and respect for different cultural values, beliefs, and practices, without introducing stereotypes, are included on the exam.
Health Situation	In the development of the Perinatal Nursing Exam, the childbearing person and family are viewed holistically.
Health-Care Environment	It is recognized that perinatal nursing is practised in a variety of settings and for the purposes of the Perinatal Nursing Exam, the health-care environment is only specified where it is required for clarity or in order to provide guidance to the candidate.

The Perinatal Nursing Exam

List of Competencies

The competencies have been organized according to the following five categories: Preconception, Antenatal, Labour and Birth, Postpartum and Newborn and Infant Care.

The childbearing, pregnant, breastfeeding and postpartum person includes women and those individuals who prefer and/or choose terms other than “woman” to define their identities. This includes, but is not limited to, transgender, genderqueer and intersex people.

Preconception

The perinatal nurse:

- 1.1 Interprets the preconceptional health history, including:
 - 1.1a obstetrical and reproductive health history (e.g., GTPAL, genital mutilation, reproductive surgery);
 - 1.1b medical history and associated therapies (e.g., diabetes, hypertension, obesity, thyroid disorders, physical challenges); and
 - 1.1c mental health history and associated therapies (e.g., depression, eating disorders, anxiety).
- 1.2 Selects appropriate nursing interventions for the childbearing person’s and/or family’s health before pregnancy based on:
 - 1.2a social history and resources (e.g., single or partnered, social supports);
 - 1.2b lifestyle (e.g., physical activity, sexual health, smoking, alcohol/substance use);
 - 1.2c nutrition (e.g., folic acid, food security, herbal supplements, cultural and religious practices);
 - 1.2d immunization (e.g., influenza, rubella, varicella); and
 - 1.2e environmental and occupational health hazards/exposures (e.g., infectious diseases, toxins, radiation).
- 1.3 Demonstrates knowledge of:
 - 1.3a impaired fertility (e.g., common causes and treatments); and
 - 1.3b genetic risk (e.g., personal and family history of genetic diseases or disorders).
- 1.4 Selects appropriate nursing interventions in response to the following:
 - 1.4a abuse and/or intimate partner violence; and
 - 1.4b history of perinatal loss.

Antenatal

The perinatal nurse:

- 2.1 Interprets the following data to establish health status during the antenatal period including:
 - 2.1a obstetrical and reproductive health history;
 - 2.1b medical history and associated therapies (e.g., immunization status, Rh status, pre-pregnancy BMI);
 - 2.1c mental health history and associated therapies (e.g., anxiety, depression, post-traumatic stress disorder [PTSD]);
 - 2.1d physiological changes (e.g., breast changes, weight gain, fundal height);
 - 2.1e psychosocial, emotional and developmental issues (e.g., body image, developmental tasks of pregnancy, grief and loss);
 - 2.1f nutrition (e.g., folic acid, herbal supplements, pica);
 - 2.1g physical activity;
 - 2.1h sexual health (e.g., STI screening, sexual activity, at-risk behaviour);
 - 2.1i culture and ethnicity;
 - 2.1j social support and resources (e.g., food and housing security, community referral); and
 - 2.1k communication challenges (e.g., language, hearing or visual impairment, health literacy).
- 2.2 Advocates for the pregnant person's safety by:
 - 2.2a screening for intimate partner violence and/or abuse; and
 - 2.2b selecting appropriate nursing interventions when intimate partner violence and/or abuse has been identified (e.g., referral).
- 2.3 Discusses with the pregnant person and the family regarding:
 - 2.3a common discomforts of pregnancy (e.g., fatigue, heartburn, constipation);
 - 2.3b warning signs of complications in pregnancy (e.g., bleeding, pain, decreased fetal movement);
 - 2.3c environmental risks (e.g., chemical exposure, occupational hazards, toxoplasmosis, vector-borne illness); and
 - 2.3d food safety (e.g., listeriosis, fish, raw foods, unpasteurized foods).
- 2.4 Identifies the indications for and implications of prenatal testing (e.g., laboratory tests, ultrasounds, glucose tolerance testing, genetic tests).
- 2.5 Identifies key elements of fetal development (e.g., critical periods of development for each body system).

- 2.6 Interprets results of fetal health surveillance, including:
 - 2.6a fetal movement;
 - 2.6b fetal heart rate auscultation;
 - 2.6c biophysical profile; and
 - 2.6d electronic fetal monitoring (e.g., non-stress test).
- 2.7 Selects appropriate nursing interventions based on the following antenatal conditions:
 - 2.7a nausea and vomiting of pregnancy;
 - 2.7b threatened preterm labour (e.g., fetal fibronectin, fetal lung maturation);
 - 2.7c rupture of membranes (e.g., preterm or premature);
 - 2.7d antepartum hemorrhage (e.g., abruption placenta, placenta previa, spontaneous abortion);
 - 2.7e physical trauma (e.g., falls, motor vehicle collision, violence);
 - 2.7f hypertensive disorders of pregnancy (e.g., gestational, preeclampsia);
 - 2.7g hematological disorders (e.g., anemia, idiopathic thrombocytopenic purpura [ITP], sickle cell anemia, thrombophilias);
 - 2.7h diabetes (e.g., pre-existing, gestational, type 2);
 - 2.7i infections (e.g., sexually transmitted infections, group B streptococcus, parvovirus, periodontal disease, influenza, MRSA);
 - 2.7j multiple gestation (e.g., chorionicity, presentation, higher order);
 - 2.7k mental health conditions (e.g., depression, eating disorders, anxiety);
 - 2.7l pre-existing medical conditions (e.g., asthma, obesity, epilepsy, cardiovascular disorders, renal disorders, cancer); and
 - 2.7m substance use (e.g., smoking, alcohol, prescription and non-prescription drugs, recreational drugs).
- 2.8 Assists the pregnant person and family to adapt to an at-risk pregnancy (e.g., anxiety and stress related to outcome of pregnancy and need for increased surveillance).
- 2.9 Selects appropriate nursing interventions when caring for the pregnant adolescent (e.g., developmental tasks of adolescence, health risks, nutrition, body image, social support).
- 2.10 Selects appropriate nursing interventions when caring for the pregnant person with advanced age (e.g., health risks, anxiety).
- 2.11 Selects appropriate nursing intervention when caring for a person with an unplanned pregnancy (e.g., social/emotional support, community resources, pregnancy choices).

- 2.12 Collaborates with the pregnant person to promote informed choice (e.g., infant feeding, antenatal testing, circumcision, VBAC).
- 2.13 Selects nursing interventions to promote breastfeeding (e.g., benefits of breastfeeding, risks of breast milk substitutes [formula], skin-to-skin care).
- 2.14 Collaborates with the pregnant person and family to identify their learning needs related to labour, birth and transition to parenting (e.g., prenatal education, adoption, surrogate pregnancy).

Labour and Birth

The perinatal nurse:

- 3.1 Interprets data to establish presenting health status during labour and birth including:
 - 3.1a antenatal and obstetrical history;
 - 3.1b medical history (e.g., asthma, obesity, infectious diseases, cardiovascular disease, physical challenges);
 - 3.1c mental health history (e.g., depression, anxiety, post-traumatic stress disorder [PTSD]);
 - 3.1d social history (e.g., substance use, smoking, violence, financial resources, family support);
 - 3.1e communication challenges (e.g., language, hearing or visual impairment, health literacy); and
 - 3.1f diagnostic investigations (e.g., laboratory results, ultrasound).
- 3.2 Interprets intrapartum data to determine the status of labour, including:
 - 3.2a Leopold's manoeuvres;
 - 3.2b assessment of contractions;
 - 3.2c vaginal exam (e.g., dilatation, effacement, station, presentation, position); and
 - 3.2d membrane status.
- 3.3 Selects appropriate method(s) of fetal surveillance during labour (e.g., intermittent auscultation, continuous fetal heart monitoring).
- 3.4 Interprets data related to fetal well-being including:
 - 3.4a fetal heart rate patterns;
 - 3.4b amniotic fluid; and
 - 3.4c fetal scalp sampling.
- 3.5 Selects appropriate nursing interventions in the presence of atypical or abnormal fetal heart rate (FHR) patterns.

- 3.6 Selects appropriate nursing interventions related to the labouring person's and family's adaptation to labour (e.g., coping with labour, birth plan/preferences, pain assessment).
- 3.7 Selects appropriate nursing interventions to promote progress of all stages of labour (e.g., continuous labour support, position changes, mobility).
- 3.8 Implements appropriate nursing interventions to provide pain management using:
 - 3.8a non-pharmacological options (e.g., massage, warm or cold compresses, hydrotherapy, relaxation and distraction, continuous labour support, TENS, sterile water injection);
 - 3.8b nitrous oxide;
 - 3.8c opioid analgesia (e.g., patient-controlled analgesia [PCA]); and
 - 3.8d epidural analgesia (e.g., patient-controlled epidural analgesia [PCEA]).
- 3.9 Selects appropriate nursing interventions to manage the following actual or potential complications during labour:
 - 3.9a labour dystocia (e.g., augmentation);
 - 3.9b hypertensive disorders of pregnancy (e.g., seizure prophylaxis);
 - 3.9c diabetes (e.g., changing insulin requirements);
 - 3.9d preterm labour (e.g., fetal neuroprotection, extremes of viability);
 - 3.9e prolonged rupture of membranes;
 - 3.9f infections (e.g., group B streptococcus, active herpes, HIV);
 - 3.9g multiple gestation (e.g., presentation, risk for postpartum hemorrhage);
 - 3.9h fetal compromise (e.g., anomalies, intrauterine growth restriction, amniotic fluid abnormalities);
 - 3.9i intrauterine fetal demise;
 - 3.9j gynecological complications (e.g., previous uterine and cervical surgeries, fibroids, genital mutilation, cervical sutures);
 - 3.9k history of sexual abuse and/or violence;
 - 3.9l obesity (e.g., slow progress of labour, challenges with monitoring uterine contractions and fetal status);
 - 3.9m fetal presentation (e.g., occiput posterior, planned breech birth); and
 - 3.9n trial of labour after cesarean (e.g., VBAC).
- 3.10 Selects appropriate nursing interventions to respond to the following urgent and emergent situations in the intrapartum period:
 - 3.10a atypical and abnormal electronic fetal heart rate patterns;

- 3.10b complications of hypertensive disorders of pregnancy (e.g., hemolysis, elevated liver enzymes, low platelet count [HELLP] syndrome, eclampsia);
- 3.10c hemorrhage (e.g., abruptio placenta, placenta previa, disseminated intravascular coagulation [DIC]);
- 3.10d shoulder dystocia;
- 3.10e malpresentation (e.g., unexpected breech, transverse lie);
- 3.10f uterine rupture;
- 3.10g cord complications (e.g., prolapse);
- 3.10h precipitous birth;
- 3.10i abnormal placentation (e.g., vasa previa, placenta accreta); and
- 3.10j urgent or emergent cesarean birth.
- 3.11 Selects appropriate nursing interventions for the person experiencing planned cesarean birth.
- 3.12 Identifies indications for and risk factors associated with cervical ripening, induction of labour or augmentation.
- 3.13 Selects appropriate nursing interventions for the person receiving the following methods of cervical ripening, labour induction or augmentation:
 - 3.13a prostaglandin;
 - 3.13b mechanical methods (e.g., Foley catheter)
 - 3.13c artificial rupture of membranes;
 - 3.13d oxytocin; and
 - 3.13e misoprostol.
- 3.14 Selects appropriate nursing interventions for assisted vaginal births using vacuum or forceps.
- 3.15 Identifies the risk factors for postpartum hemorrhage.
- 3.16 Implements appropriate nursing interventions to manage postpartum hemorrhage.
- 3.17 Identifies risk factors for newborns who may experience challenges with transition to extrauterine life.
- 3.18 Implements nursing interventions for the newborn who requires resuscitation (e.g., neonatal resuscitation [NRP]).
- 3.19 Assigns the Apgar score.
- 3.20 Implements appropriate nursing interventions to promote optimal newborn transition to extrauterine life (e.g., skin to skin).

- 3.21 Selects appropriate nursing interventions when administering medications to the newborn (e.g., vitamin K, erythromycin ointment, prophylaxis based on transmissible infections [HIV, hepatitis]).
- 3.22 Facilitates parental and family attachment to the newborn.
- 3.23 Selects appropriate nursing interventions to facilitate initiation of breastfeeding.

Postpartum (up to 3 months)

The perinatal nurse:

- 4.1 Interprets data to establish health status during the postpartum period including:
 - 4.1a pre-existing medical conditions (e.g., diabetes, obesity, hypertension, thyroid dysfunction);
 - 4.1b pre-existing or new onset mental health conditions (e.g., depression, bipolar);
 - 4.1c past and present obstetrical history (e.g., cesarean birth, assisted vaginal birth, spontaneous vaginal birth); and
 - 4.1d lifestyle (e.g., substance use, smoking, violence, financial resources, social supports).
- 4.2 Selects nursing interventions to promote confidence in parenting and support family development related to:
 - 4.2a promoting attachment;
 - 4.2b identifying learning opportunities (e.g., infant care, parenting roles);
 - 4.2c evaluating learning outcomes (e.g., self-care and infant care); and
 - 4.2d preparing for transition to home.
- 4.3 Identifies key elements of postpartum physical assessment (e.g., fundus, lochia, perineum, breasts, vital signs, incision).
- 4.4 Identifies key elements of postpartum psychosocial assessment (e.g., birth experience, mood).
- 4.5 Selects appropriate nursing interventions to manage the following actual or potential conditions during the postpartum period:
 - 4.5a pain (e.g., perineal, incisional);
 - 4.5b fluid imbalance (e.g., shortness of breath, dehydration, edema);
 - 4.5c bladder dysfunction (e.g., urinary retention, incontinence);
 - 4.5d bowel dysfunction (e.g., constipation, hemorrhoids);
 - 4.5e impaired skin integrity (e.g., perineum, cesarean incision, hematoma, nipples);
 - 4.5f postpartum emotional adjustment (e.g., “baby blues,” postpartum depression);
 - 4.5g anemia;
 - 4.5h immunization status (e.g., rubella, pertussis, varicella);
 - 4.5i Rh negative;
 - 4.5j infections (e.g., wound, uterine, breast and urinary tract infections);
 - 4.5k substance use (e.g., methadone);

- 4.5l mobility challenges (e.g., symphysis pubis separation); and
- 4.5m risk for venous thromboembolism (e.g., increased BMI, limited mobility).
- 4.6 Selects appropriate nursing interventions to respond to the following urgent and emergent situations in the postpartum period:
 - 4.6a post-epidural/spinal complications (e.g., post-dural puncture headache);
 - 4.6b hemorrhage (e.g., uterine atony, laceration, retained placental tissue);
 - 4.6c thromboembolic events (e.g., pulmonary embolism, deep vein thrombosis [DVT]);
 - 4.6d hypertensive disorders of pregnancy (e.g., seizures, HELLP);
 - 4.6e sepsis; and
 - 4.6f postpartum psychosis.
- 4.7 Selects appropriate nursing interventions to promote self-care (e.g., physical and emotional).
- 4.8 Selects appropriate nursing interventions to support the family experiencing grief and loss related to:
 - 4.8a admission to intensive care (e.g., postpartum person, newborn);
 - 4.8b newborn anomalies (e.g., cleft lip, cardiac condition, chromosomal abnormalities);
 - 4.8c perinatal loss (e.g., fetal or neonatal demise, apprehension, adoption, intrapartum or postpartum death); and
 - 4.8d unexpected outcome (e.g., birth trauma, loss of idealized infant, loss of idealized birth experience).
- 4.9 Instructs family on follow-up care post-discharge (e.g., postpartum checkup, community resources).

Newborn and Infant Care (up to 3 months)

The perinatal nurse:

- 5.1 Identifies key elements of newborn physical assessment (e.g., expected findings and variants, vital signs).
- 5.2 Selects appropriate nursing interventions to promote thermal stability of the newborn (e.g., skin to skin).
- 5.3 Selects appropriate nursing interventions based on the following actual or potential newborn complications:
 - 5.3a hypoglycemia;
 - 5.3b hypothermia or hyperthermia;
 - 5.3c hyperbilirubinemia;
 - 5.3d abnormal physical assessment (e.g., birth trauma, cardiac irregularities, subgaleal hemorrhage);

- 5.3e infections (e.g., group B streptococcus, sepsis);
- 5.3f neonatal abstinence syndrome;
- 5.3g manifestations of illness (e.g., lethargy, poor feeding, regurgitation, tachypnea, indrawing); and
- 5.3h pain or stress (e.g., procedural, birth trauma).
- 5.4 Selects appropriate nursing interventions to address newborn care related to:
 - 5.4a infant hygiene (e.g., bathing, skin care, cord care);
 - 5.4b newborn screening (e.g., metabolic, hearing, pulse oximetry); and
 - 5.4c prevention of plagiocephaly (e.g., tummy time).
- 5.5 Selects appropriate nursing interventions to address newborn safety in the hospital and/or at home related to:
 - 5.5a infant security (e.g., unattended infant);
 - 5.5b safe infant sleep (e.g., flat surface, place on back to sleep);
 - 5.5c environment (e.g., second- and third-hand smoke, room temperature);
 - 5.5d equipment (e.g., car seat, crib); and
 - 5.5e infant behaviours (e.g., crying, cluster feeding).
- 5.6 Demonstrates knowledge of normal infant growth and development including:
 - 5.6a physical (e.g., growth spurts, weight gain);
 - 5.6b neurological (e.g., reflexes);
 - 5.6c social (e.g., smile); and
 - 5.6d behavioural states (active alert, quiet alert, sleeping, drowsy).
- 5.7 Selects appropriate nursing interventions for effective breastfeeding (e.g., cues, latch, feeding assessment, feeding patterns, adequate intake and output).
- 5.8 Selects appropriate nursing interventions to support exclusive breastfeeding (e.g., hand expression, skin-to-skin contact).
- 5.9 Identifies medical indications and appropriate methods for supplementation of breastfed infants.
- 5.10 Selects appropriate nursing interventions to address common breastfeeding challenges related to the:
 - 5.10a newborn (e.g., sleepy or fussy, prematurity, tongue tie, candidiasis); and
 - 5.10b breastfeeding person (e.g., sore nipples, engorgement, breast surgery, mastitis, candidiasis, flat or inverted nipples).

- 5.11 Selects appropriate nursing interventions related to milk expression (e.g., techniques, indications, handling and storage).
- 5.12 Selects appropriate nursing interventions for the new parent and/or family choosing to use breast milk substitute (e.g., preparation, safe storage, feeding cues and amount, output).
- 5.13 Selects nursing interventions to support the new parent(s) in the transition to parenthood (e.g., accessing community resources, social supports, shaken baby syndrome prevention).
- 5.14 Instructs family on follow-up care (e.g., immunization, infant checkup).