Exam Blueprint and Specialty Competencies

Introduction – Blueprint for the Community Health Nursing Certification Exam

The primary function of the blueprint for the CNA Community Health 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 community health 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 community health 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 Community Health 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 Community Health Nursing Certification Exam, the content consists of the competencies of a fully competent practising community health 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 Community Health 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 list of competencies for community health nurses, the following assumptions were made:

Health

- is a resource for living and is not merely the absence of illness and disease.
- is holistic and is influenced by the broad determinants of health.
- is a personal concept and is defined by the client.
- is viewed within the context of the client's environment and culture.
- is fluid and dynamic throughout the lifespan.

The client

- refers to individuals, families, groups, communities and/or populations throughout the lifespan.
- defines who they are and who their family is.
- has physical, psychological, social, spiritual, cultural and developmental characteristics and support systems that are interdependent.
- has strengths and abilities.
- has the right to make decisions related to their health care.
- is responsible for their health.
- is an active participant in meeting their own health needs.
- has a fundamental right to access the resources necessary for health.

The environment

- contributes to health, safety and well-being.
- is influenced by social, cultural, economic, political, natural and built factors at the local, national and global levels.
- includes diverse remote, rural and urban settings.

The community health nurse

- is a Registered Nurse and a specialist who practises in the community.
- practises in accordance with the standards of their provincial or territorial regulatory body.
- practises in accordance with the Canadian Community Health Nursing Professional Practice Model and Standards of Practice.
- practises in accordance with the *Code of Ethics* of the CNA.
- collaborates with clients where they live, work, learn, meet and play.
- works autonomously and independently in a variety of settings.
- values and believes in caring, the principles of primary health care, multiple ways of knowing and individual/community participation and empowerment.
- values social justice, inclusivity and equity as the foundations of practice.
- is a steward of the environment.
- strives for excellence, promotes evidence-informed practice and maintains professional competence.
- shares professional knowledge and mentors colleagues and students.
- works proactively through advocacy and participation in relevant professional associations.
- advocates for effective and efficient use of community health nursing resources.
- uses reflective practice and continuous learning.

Competency Categories

The competencies are classified under a seven-category scheme commonly used to organize community health nursing.

Some of the competencies lend themselves to one or more of the categories; therefore, these seven 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 Community Health 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
Health Promotion	15-20%
Prevention and Health Protection	15-20%
Health Maintenance, Restoration and Palliation	15-20%
Building Capacity	10-15%
Professional Relationships	5-10%
Health Equity	15-20%
Professional Responsibility and Accountability	5-10%

Technical Specifications

In addition to the specifications related to the competencies, other variables are considered during the development of the Community Health 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 Community Health Nursing Certification Exam, 60 to 70 per cent of the questions are presented as independent questions and 30 to 40 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 Community Health 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 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 community health 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.

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

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 Community Health Nursing Exam
Knowledge/Comprehension	10-20%
Application	50-60%
Critical Thinking	25-35%

Contextual Variables

Client Culture: Questions are included that represent awareness, sensitivity, and respect for different cultural values, beliefs, and practices.

Client Health Situation: In the development of the Community Health Nursing Examination, the client is viewed within the biological, psychological, social, cultural, developmental, environmental and spiritual dimensions of a total life experience.

Health-Care Environment: It is recognized that community health nursing is practiced in a variety of settings, that people and their physical, social psychological and spiritual environment are interdependent and that socio-political environment influence community health nursing practice.

Conclusions

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

Community health 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

Community Health Nursing Exam Development Guidelines

STRUCTURAL VARIABLES		
Examination Length and Format	Approximately 165 multiple choice questions	
Question Presentation	60-70% independent questions 30-40% case-based questions	
Cognitive Ability – Levels of Questions	Knowledge/Comprehension Application Critical Thinking	10-20% of questions 50-60% of questions 25-35% of questions
Competency Categories	Health promotion Prevention and health protection Health maintenance, restoration and palliation Building capacity Professional relationships Health equity Professional responsibility and accountability	15-20% of questions 15-25% of questions 15-20% of questions 10-15% of questions 5-10% of questions 15-20% of questions 5-10% of questions
CONTEXTUAL VARIABLES		
Client	The client of community health nurses may be an individual, family, group, aggregate, community, population system or society.	
Client Culture	Questions are included that represent awareness, sensitivity, and respect for different cultural values, beliefs, and practices.	
Client Health Situation	In the development of the Community Health Nursing Examination, the client is viewed within the biological, psychological, social, cultural, developmental, environmental and spiritual dimensions of a total life experience.	
Health-Care Environment	It is recognized that community health nursing is practiced in a variety of settings, that people and their physical, social psychological and spiritual environment are interdependent and that socio-political environment influence community health nursing practice.	

The Community Health Nursing Certification Exam

List of Competencies

Health Promotion

The community health nurse:

1.1 Identifies the determinants of health.

1.2 Assesses the health status of the individual or family across the lifespan within the context of the determinants of health for the following:

1.2a child-bearing family — prenatal period (e.g., comprehensive prenatal assessment, mental health, immunization status);

1.2b child-bearing family — postpartum period (e.g., comprehensive postnatal assessment, mental health);

1.2c child-bearing family — parenting (e.g., family functioning, parenting skills, growth and development);

1.2d infant (e.g., safety and security, growth and development, infant feeding, infant behaviour, attachment, immunization status);

1.2e children (e.g., safety and security, growth and development, physical activity, behaviour, socialization, immunization status, nutrition, screening, self-esteem, peer relations, gender expression);

1.2f youth (e.g., immunization status, nutrition, physical activity, safety and security, body image, self-esteem, peer and adult relationships, mental health, sexuality, gender expression);

1.2g adult (e.g., immunization status, physical activity, safety and security, literacy, relationships, housing, food and water security, mental health, work, finances, sexuality, gender expression);

1.2h older adult (e.g., immunization status, safety and security, relationships, housing, food and water security, finances, sexuality, mental health, activities of daily living, capacity, gender expression).

1.3 Implements individual and family-level health promotion strategies for the following:

1.3a child-bearing family — prenatal care (e.g., facilitating access to prenatal care, promoting baby-friendly initiatives, mental health screening);

1.3b child-bearing family — postpartum care (e.g., breastfeeding support, anticipatory guidance, smoke-free home, SIDS prevention, building individual and family capacity, mental health screening);

1.3c child-bearing family — parenting (e.g., parenting education, safety, family nutrition, facilitating access to community resources);

1.3d infant (e.g., health teaching, screening, public awareness campaigns, developmental milestones, injury prevention and feeding during the first year; immunization);

1.3e child (e.g., health teaching, screening, public awareness campaigns, developmental milestones, nutritional needs and injury prevention, immunization, collaboration with preschool and school communities);

1.3f youth (e.g., health teaching, counselling, public awareness campaigns, self-esteem, body image, nutrition, peer support, immunization, lifestyle choices, sexual health, social marketing, collaboration with schools and communities)

1.3g adult (e.g., health teaching, public awareness campaigns, work-life balance, lifestyle choices, nutrition, sexual health, formal/informal supports, immunization);

1.3h older adult (e.g., health teaching, public awareness campaigns, advocacy, outreach, socialization, formal/informal supports, bereavement support, immunization, lifestyle choices).

1.4 Conducts community assessments based on the following:

1.4a physical environment (e.g., home, school, workplace, daycare, community and recreation facilities, food, deserts);

1.4b socio-economic environment (e.g., social, spiritual and cultural diversity; municipal services; transportation; food and water security; employment; homelessness);

1.4c political environment (e.g., social programs and services; policy influence at multiple levels of government; knowledge of current legislation);

1.4d built environment (e.g., traffic, noise, industry, housing, sanitation, lighting, roads, green spaces);

1.4e natural environment (e.g., water quality, air quality, soil, sun, allergens, climate change).

1.5 Implements community-level health promotion strategies for the following:

1.5a physical environment (e.g., advocacy, accessibility);

1.5b socio-economic environment (e.g., meal programs, advocacy for access to transportation, anti-poverty campaigns, involvement of diverse groups in resource development);

1.5c political environment (e.g., mobilizing community action, committee participation);

1.5d built environment (e.g., advocacy for lighting on walking trails, road safety, bike lanes, accessibility; referral to heating/cooling stations);

1.5e natural environment (e.g., sun safety, safe medication disposal, conservation, recycling, climate change).

1.6 Implements interventions to improve the health of individuals, families and communities by:

1.6a strengthening community action (e.g., advocacy, coalition building, community organizing, screening, negotiation, mediation);

1.6b building healthy public policy (e.g., case reporting, advocacy, coalition building);

1.6c creating supportive environments (e.g., negotiation, mediation, social marketing, referral, consultation, collaboration, facilitation, outreach, harm reduction);

1.6d developing personal skills (e.g., health teaching, advocacy, counselling, harm reduction, motivational interviewing);

1.6e reorienting health services (e.g., case reporting, case finding, advocacy, surveillance, case coordination, disease or health event investigation, referral).

1.7 Evaluates the impact of health promotion strategies (e.g., measures outcomes through surveys, focus groups, surveillance data).

Prevention and Health Protection

The community health nurse:

2.1 Recognizes the continuum of prevention (i.e., primary, secondary, tertiary).

2.2 Applies the appropriate level of preventive intervention.

2.3 Uses multiple sources of data to assess changes in individual, family and community health status including the following:

- 2.3a observational data (e.g., trends, unusual events, community-identified concerns, windshield surveys, environmental scans);
- 2.3b client records (e.g., number of visits, trends, outcomes);
- 2.3c organization records and reports (e.g., number of influenza cases, hospital emergency visits);
- 2.3d key community members and agencies (e.g., key informant interviews, surveys, focus groups)
- 2.3e epidemiological data (e.g., incidence rates, prevalence, immunization rates, medical health officer reports, active and passive surveillance data);
- 2.3f community profile (e.g., demographics);
- 2.3g evidence-informed research and knowledge translation strategies.

2.4 Collaborates with individuals, families and communities to reduce potential health risks.

2.5 Develops a plan of action to address community health status changes (e.g., healthy food choices in schools, safe walking trails).

2.6 Supports individuals, families and communities to make informed choices about protective and preventive health measures (e.g., immunization, infant feeding, home safety).

2.7 Applies the principles of harm reduction to minimize health risks within the continuum of prevention (e.g., safer sex, needle exchange, safe injection sites, intimate partner violence, fall prevention, pressure injury avoidance, medication reconciliation).

2.8 Evaluates protective and preventive health interventions designed to address identified individual, family and community health issues.

2.9 Applies the following principles of immunization:

- 2.9a informed consent (e.g., vaccine hesitancy);
- 2.9b screening;
- 2.9c contraindications (e.g., allergies, vaccine components, pregnancy);
- 2.9d vaccine administration and monitoring (e.g., safety, documentation);
- 2.9e anaphylaxis management;
- 2.9f cold chain;
- 2.9g immunity related to vaccine type;
- 2.9h types of immunity (e.g., active, passive, cross, herd).

2.10 Recognizes signs and symptoms of the following communicable diseases:

- 2.10a vaccine preventable (e.g., influenza, pertussis, measles, pneumococcal, HPV);
- 2.10b non-vaccine preventable (e.g., HIV, hepatitis C, febrile respiratory illnesses, Norwalk virus);
- 2.10c health care acquired (e.g., MRSA, VRE, *C. difficile*);
- 2.10d emerging and resurgent (e.g., West Nile virus, hantavirus, tuberculosis, Lyme disease, STBBIs);
- 2.10e common food-borne (e.g., *E. coli*, hepatitis A, listeriosis);
- 2.10f parasitic (e.g., lice, scabies, bed bugs);
- 2.10g water-borne (e.g., shigellosis, amebiasis, cholera, giardiasis).

2.11 Implements principles of communicable disease management related to the following:

- 2.11a mode of transmission (e.g., agent/organism, reservoir, portal of exit, portal of entry, susceptible host);
- 2.11b infection control (e.g., protection of the public, hand hygiene, PPE, isolation precautions, disinfection);
- 2.11c active and passive surveillance;
- 2.11d primary, secondary and tertiary prevention related to communicable disease exposure (e.g., health education, response to outbreaks, contact tracing, directly observed therapy);

2.11e the process and rationale of reportable communicable diseases (e.g., surveillance, legislation);

2.11f outbreak management (e.g., endemic, epidemic, pandemic).

2.12 Assesses safety and risk as they apply to injury prevention related to client, environment and nurse (e.g., equipment safety, home safety, working alone).

2.13 Applies community health nursing interventions throughout the phases of emergency preparedness and disaster management (e.g., triage, evacuation, collaboration).

Health Maintenance, Restoration and Palliation

The community health nurse:

3.1 Assesses the health needs of clients to determine whether community health nursing interventions are required (e.g., surveillance, intake assessments, case findings).

3.2 Develops a client-centred plan of care in collaboration with the individual and family and the interprofessional team (e.g., family meetings, case conferences, respite plan, personal safety plan, consultation, referrals).

3.3 Applies the community health nursing process to address health maintenance, restoration and palliation needs related to the following:

3.3a newborn and postpartum complications (e.g., mental health, mastitis, newborn jaundice);

3.3b management of chronic diseases (e.g., diabetes, cardiovascular disease, renal disease, cancer, compromised respiratory system, obesity);

3.3c medication management (e.g., best possible medication history, interactions, contraindications, adherence);

3.3d activities of daily living (e.g., physical, instrumental);

3.3e end-of-life support and care;

3.3f pain management (e.g., acute, chronic, breakthrough; safety related to medications and controlled substances; non-pharmaceutical comfort measures);

3.3g nutrition (e.g., food and water security, modified diets, hydration and fluid balance, enteral feeding);

3.3h elimination (e.g., constipation, catheterizations, enterostomal therapy);

3.3i wound care (e.g., staging, types, healing, skin integrity, signs of infection, underlying causes);

3.3j infusion therapy (e.g., fluid balance, medication administration, peripheral and central venous access devices);

3.3k airway management (e.g., home oxygen, intubation, tracheotomy, home ventilator);

3.3l infection control (e.g., health care acquired, communicable disease, immunocompromised, safe handling and disposal of products).

3.4 Supports the client to make informed choices related to health care (e.g., advance directives, power of attorney, living at risk).

3.5 Facilitates referral to evidence-informed treatment(s) and resources for individualized care (e.g., psychosocial intervention, harm-reduction services, withdrawal management services, primary care, pharmacological approaches, peer support).

3.6 Collaborates with the interprofessional team to explore available treatment options, accepted by the person, for physical, psychosocial and spiritual symptom management.

3.7 Demonstrates the ability to delegate nursing care responsibilities to the client, the family or regulated/unregulated health-care workers.

Capacity Building

The community health nurse:

4.1 Conducts individual, family and community assessments to identify needs, strengths and available resources (e.g., primary and secondary data, windshield survey).

4.2 Assesses the readiness of the individual, family and community for planned change (e.g., perception of needs, home environment changes, community mobilization, previous history).

4.3 Collaborates to develop health plans for individuals, families and communities (e.g., with individuals, with key community members, with members of the health-care team).

4.4 Uses capacity building and community development principles to improve health outcomes for individuals, families and communities (e.g., advocacy, partnership, empowerment).

4.5 Uses population health promotion strategies to address health issues (e.g., coalition building, partnerships, networks).

4.6 Evaluates actions, policies or programs related to capacity building by measuring their effect on health outcomes.

Professional Relationships

The community health nurse:

5.1 Recognizes that both the nurse's and client's attitudes, beliefs, feelings and values affect relationships and interventions (e.g., guest in the home/community, differing values, cultural humility, cultural competence, reciprocity).

5.2 Employs a therapeutic nurse–client relationship based on mutual trust, respect and caring while developing, maintaining and terminating the relationship (e.g., professional boundaries, confidentiality).

5.3 Demonstrates leadership skills in building and sustaining intra-professional and stakeholder relationships (e.g., team building, negotiation, conflict management, group facilitation).

5.4 Promotes and supports linkages with appropriate community resources (e.g., prevention activities, parenting groups, case meetings, coalitions, transfer of care).

Health Equity

The community health nurse:

6.1 Assesses the impact of community norms, values, beliefs and resources on the health of individuals and the community.

6.2 Understands the interactions between individuals' substance use behaviours and larger scale and structural conditions (e.g., poverty, gender inequity, colonization, racism, criminalization, prohibition) that contribute to the risk for substance use–related harm and substance use disorder.

6.3 Recognizes how current policies impact Indigenous Peoples' health (e.g., food security, food-safety contaminants, land usage plans, hunting regulations, firearms licensing issues).

6.4 Identifies and closes the gaps in health outcomes between Indigenous and non-Indigenous communities (e.g., infant mortality, maternal health, suicide, mental health, addictions, life expectancy, birth rates, infant and child health issues, chronic diseases, illness and injury incidence, availability of appropriate health services).

6.5 Advocates to advance practice and equitable health and social policies that reduce harm at the public (e.g., low-barrier housing), organizational (e.g., harm reduction supplies/education) and individual clinician (e.g., provision of evidence-based care) levels.

6.6 Supports care that is respectful of culture in all settings (e.g., religious or cultural ceremonies).

6.7 Supports individuals, families and communities in making informed choices relative to alternative and/or complementary health-care options (e.g., herbal medications, meditation, prayer, traditional medicine).

6.8 Advocates for appropriate resource allocations (e.g., human, financial) to promote access to services (e.g., transportation, location of off-site programs).

6.9 Applies strategies to promote access to services (e.g., case finding, outreach, referrals, awareness of support and services, advocacy, home visits, child care, transportation).

6.10 Evaluates strategies that promote access to needed services (e.g., survey of participants, focus groups).

6.11 Identifies service inequities or gaps that influence health determinants (e.g., victimization, vulnerable populations, governmental and organizational policies).

6.12 Identifies specific populations that will likely require the support of trained interpreters and demonstrates the ability to utilize these services when providing care to clients.

6.13 Works collaboratively with clients and/or professional colleagues to enhance access and minimize inequities (e.g., case conference, social services, community agencies, using appropriate channels for advocacy).

Professional Responsibility and Accountability

The community health nurse:

7.1 Recognizes actual and potential risk to self or others (e.g., sexual, physical, verbal, financial and emotional abuse; dangerous or illegal activities).

7.2 Responds to situations that involve actual or potential risk to self or others (e.g., delaying service in risky situations, reporting to appropriate authorities, developing safety plans, ethical dilemmas).

7.3 Practises in response to changing and emerging health needs of the individual and community (e.g., communicable disease outbreaks, emergency response, functional status changes).

7.4 Identifies the nurse's role and professional responsibilities related to MAiD.

7.5 Manages caseload based on prioritizing (e.g., time management, acuity of care, resource allocation, infection control).

7.6 Applies standards, principles and self-awareness to manage community health practice in accordance with all relevant legislation, regulatory body standards, codes and organizational policies.