
BLUEPRINT FOR THE 2007 CANADIAN MIDWIFERY REGISTRATION EXAMINATION



**A National Assessment of the Entry-Level
Competencies for Canadian Midwives**

CANADIAN MIDWIFERY REGISTRATION EXAMINATION BLUEPRINT

INTRODUCTION

Each province and territory is responsible for ensuring that Canadian and internationally educated applicants for midwifery registration meet an acceptable level of competence before they begin to practise in Canada. This level of competence is measured, in part, by the *Canadian Midwifery Registration Examination (CMRE)*. The CMRE was developed in 2005-06 by the Canadian Midwifery Regulators Consortium, the network of midwifery regulatory authorities in Canada, with support and expertise from examination consultants at Assessment Strategies Inc. The CMRE continues to be reviewed and further developed to ensure the continued validity of the examination and to reflect what is expected of an entry-level midwife beginning to practice in Canada.

CANADIAN COMPETENCIES FOR MIDWIVES

The CMRE is based on the *Canadian Competencies for Midwives*, a description of entry-level practice that was developed in 2004. This document outlines the knowledge, skills, and professional attributes that Canadian midwives are expected to have at an entry-to-practice level, and it provides the basis for the CMRE.

The *Canadian Competencies for Midwives* was developed via a process that involved a detailed analysis of competency statements from each regulated jurisdiction in Canada; an in-person intensive workshop involving regulators and educators from all regulated jurisdictions, many of whom were practising midwives; and electronic collaboration and consultation amongst workshop participants and all boards/councils of regulatory authorities. The document will be reviewed at regular intervals to ensure it remains accurate and up-to-date.

EXAM BLUEPRINT

While the *Canadian Competencies for Midwives* outlines the competencies that must be assessed, the *Exam Blueprint* defines how many questions should address each competency, and identifies structural (e.g. length of exam, type of questions) and contextual issues (e.g. the fact that both hospital and out-of-hospital settings should be included). The process to develop the blueprint was undertaken in 2005 by the Canadian Midwifery Regulators Consortium's Examination Committee, made up of representatives from each regulated jurisdiction. Assessment Strategies Inc. provided psychometric expertise and guidance to this process. Revisions were made in 2007 for clarification and to account for some minor changes to the exam format.

The resulting *Exam Blueprint 2007* provides a detailed description of the CMRE. The details are below.

COMPETENCIES TESTED ON THE CMRE

Competency Weighting

To ensure that the examination accurately reflects the profile of *entry-level* midwifery practice, the competencies, from the *Canadian Competencies for Midwives*, were grouped according to their relative importance. This was accomplished via survey ratings and a qualitative review by the Canadian Midwifery Registration Examination (CMRE) Committee.

The exam committee identified 34 competencies that will not be tested on the CMRE because they are either not fairly assessed in a written exam format and/or they are addressed by other aspects of assessment processes. The remaining 140 competencies represent entry-level competencies related to safe and effective practice that are common across the Canadian jurisdictions and that can be measured effectively on a written examination.

The weighting scheme presented in Table 1 below is based on the grouping of competencies identified in the process described above and the CMRE Examination Committee guidelines. The table is designed to do two things. It links the importance weighting of each competency to the number of questions on the exam about that competency. It also ensures that the overall exam length does not exceed one testing day. This scheme is used in the creation of each exam form to ensure that each one is equivalent in content matter.

Table 1. Competency Groupings and Weighting

Grouping	Number of Competencies	Approx. Number of Questions per Competency	Percentage of Questions on the CMRE
1	30	1	10-15%
2	97	2	70-75%
3	9	3	10-15%
4	4	4	5-10 %
TOTAL	140		100%

Competency Framework

The framework shown below in Table 2 identifies and organizes the competencies measured by the CMRE into the broad competency categories from the *Canadian Competencies for Midwives*. Each of these categories contains a different number of specific competencies that vary in importance and that have from one to four questions associated with them (as described above under Competency Weighting). The total number and percentage of competencies tested in each category is noted below, along with the resulting percentage of questions per category on the CMRE.

Table 2. Competency Framework

Competency Categories	Number of Competencies Assessed on the CMRE	Percentage of Questions on the CMRE
I. General Competencies	12 (8.6%)	5-10%
II. Education and Counseling	15 (10.7%)	5-10%
III. Antepartum	24 (17.1%)	25-30%
IV. Intrapartum: Care During Labour, Birth, and the Immediate Postpartum Period	38 (27.1%)	25-30%
V. Care of the Woman during the Postpartum Period, Including Breastfeeding	21 (15.0%)	10-15%
VI. Care of the Newborn and Young Infant	18 (12.9%)	10-15%
VII. Well Woman Care, Sexuality and Gynecology	8 (5.7%)	1-5%
VIII. Professional, Inter-Professional, Legal and Other Aspects of the Profession	2 (1.4%)	1-3%
IX. Professional Development	2 (1.4%)	1-3%
X. Advanced Competencies	0 (0%)	0%
TOTAL	140 (100%)	100%

EXAM FORMAT

Based on consultations with Assessment Strategies Inc., the Exam Committee identified exam format specifications. These are designed to ensure both that the exam presents situations that are relevant to Canadian midwifery and that each exam form is consistent and presents the same opportunity to candidates.

Structural Variables

Structural variables include those characteristics that determine the appearance and general design of the examination.

1. **Examination Length:** The examination will consist of between 210-230 questions. The majority of questions will be in a multiple-choice format while less than 45 questions will be in a short answer format.
2. **Question Format:** Multiple choice questions consist of a stem and four options, only one of which is the best answer. Short answer questions require candidates to list one or more best answers (each question specifies how many).
3. **Question Presentation:** The majority of questions, both multiple-choice and short-answer, are presented as case-based scenarios where a midwifery situation is described and from two to seven questions relate to that situation. Some multiple choice questions are independent (stand-alone) questions but most of these do also present a short scenario to provide context for the question. Multiple-choice questions and short-answer questions are presented separately.

Contextual Variables

Contextual variables qualify the content domain by specifying the midwifery contexts in which the examination questions will be set.

1. **Health Care Setting:** The CMRE is designed to include questions representing the variety of settings encountered when providing midwifery care in Canada. Thus, for the purpose of the CMRE, the setting is defined as either in Hospital or Out-of-Hospital. Table 3 presents the percentage ranges that serve as the guidelines for the development of each exam form.

Table 3. Distribution of questions by health care setting

Type of Health Care Setting	Target Percentage of Questions
Hospital	40-50%
Out-of-Hospital	50-60%

2. **Health Care Situation:** It is recognized that within the context of midwifery care, the client may experience a range of Normal to Abnormal health care situations. Table 4 presents the percentage ranges that served as the guideline for the development of each exam form.

Table 4. Distribution of questions by health care situation

Type of Health Care Situation	Target Percentage of Questions
Normal	50-60%
Abnormal	40-50%

Standardization

Standardization ensures that exam items are presented consistently and candidates can expect information on the exam to be presented within certain standards. The following standards are adopted for this exam:

- Metric is used for measurements
- Standard International (SI) Units is used for drug dosages
- Generic, or common, drug names are provided in all cases. In a few cases, trade names may also be provided; if they are, they will follow the generic name and will be surrounded by brackets.
- Routes of Administration are written out in full (eg intramuscular, not IM) except when used more than once in a case (see below).
- Acronyms are not used except in cases where a term appears more than once in a single case. If that happens, the term is fully written out the first time it is used, with the acronym following in brackets (eg intramuscular (IM)) and then the acronym is used in the remainder of the case.