



CHAPTER 5
POSTPARTUM CARE



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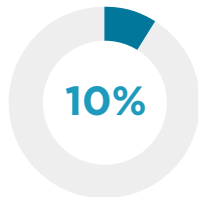
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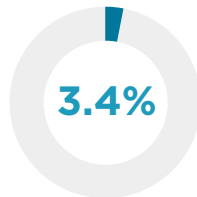
CHAPTER 5
POSTPARTUM CARE

POSTPARTUM HEALTH IN CANADA

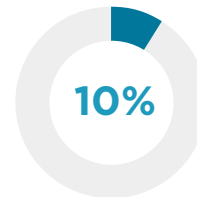
MATERNAL HEALTH



Mastitis occurs in 10% of breastfeeding women



3.4% of all women who gave birth reported **urinary incontinence** as “a great deal of a problem” in the first 3 months postpartum



10% of women who have given birth reported experiencing one or more **acts of violence** in the past 2 years



53% to 79% of women experience some form of **laceration** during vaginal birth. Third- and fourth-degree **lacerations** occur in up to 11% of women.



Endometritis occurs after 1% to 3% of vaginal births and up to 27% of caesarean births



Postpartum hemorrhage is estimated to occur in 5-6% of hospital births in Canada



16% to 30% of women with gestational diabetes develop **type 2 diabetes** by 5 to 10 years postpartum

Maternal Mental Health

Panic disorder affects about **1% to 3%** of new mothers

Obsessive-compulsive symptoms occur in **4% to 9%** of new mothers

Trauma- and stressor-related disorders, including PTSD, affect about **3%** of new mothers

The most common type of *postpartum mood change* is the postpartum blues, or baby blues, estimates of prevalence range dramatically, from **15% to 84%**

NEWBORN HEALTH



Breastfeeding initiation rates in Canada have increased; less than **25%** in 1965 vs. **90%** in 2015/16



8% of infants are born prematurely



48% of the cases of early onset neonatal sepsis were due to group B streptococcal



9.1 per 100 singleton live births are small for gestational age births



FAMILY-CENTRED POSTPARTUM EXPERIENCE

The postpartum period is a significant time for the mother, baby, partner, and family. It is a time of transition and adaptation and is formative for everyone. There are physiological adjustments for both mother and baby, and significant social and emotional adjustments for the entire family. Providing family-centred care to women, their partners, and families during the postpartum period is an essential component of the care offered by all institutions, agencies, and programs.

While the postpartum period is a normal, healthy time of life, it is challenging for families even as parents get comfortable with their roles. It is important that HCPs who are working with mothers, partners, newborns, and families focus on their individual needs and values.

Key family-centred care recommendations:

- Treat families with respect, dignity, and kindness, and learn about and respect their values and beliefs, using them to guide their care.
- Maintain open and ongoing communication with the woman and her partner/family;
- Plan the timing and purpose of each postpartum contact in partnership with the woman and her partner/family based on their individual needs.
- Provide culturally competent and safe care with cultural humility.
- Provide information and support in a timely fashion, according to the needs of the woman, her partner, and family. Information should be evidence-based and accessible according to their culture, language, and abilities so that they can promote their own and their baby's health and make informed decisions about their care and any necessary treatment.
- Support and promote the physical well-being of mother and baby and enable the mother to rest and recover from the physical demands of pregnancy and birth.
- Foster the developing relationship between the baby and their mother as well as the mother's partner and family.
- Support the mother's and her partner's emotional and mental health needs.

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The postpartum period is a significant time for the mother, baby, partner, and family. It is a time of transition and adaptation and is formative for everyone. There are physiological adjustments for both mother and baby, and significant social and emotional adjustments for the entire family.

Complex and finely tuned adjustments have physical and psychological benefits for the mother and her baby. It is important that everyone involved in the care of mothers and babies knows and acknowledges these benefits so that systems are planned and organized around the mother/baby unit and not around health care providers (HCPs).

The goals of care during the postpartum period are to:

- Support and promote the physical well-being of mother and baby and enable the mother to rest and recover from the physical demands of pregnancy and birth;
- Support the developing relationship between the baby and their mother as well as the mother's partner and family;
- Support the mother's and her partner's emotional and mental health needs;
- Support infant feeding;
- Support the mother's confidence in herself and in her baby's health and well-being, enabling her to fulfill her mothering role within her particular family and culture; and
- Support partners and other family members to enable them to develop confidence in their new role.

According to the principles of family-centred care, it is incumbent on HCPs to:

- Treat families with respect, dignity, and kindness, and learn about and respect their values and beliefs, using them to guide their care;
- Maintain open and ongoing communication with the woman and her partner/family;
- Plan the timing and purpose of each postpartum contact in partnership with the woman and her partner/family based on their individual needs;
- Provide culturally competent and safe care with cultural humility;
- Provide information and support in a timely fashion, according to the needs of the woman, her partner, and family. Ensure that information is evidence-based and accessible according to their culture, language, and abilities so that they can promote their own and their baby's health and make informed decisions about their care and any necessary treatment.



> [ADDITIONAL RESOURCES ON POSTPARTUM CARE: SEE APPENDIX A](#)



1

FAMILIES WITH SPECIAL CONSIDERATIONS

1.1 CULTURAL CONSIDERATIONS

Canadians are ethnoculturally diverse. Women from different cultures, whether Canadian-born or newcomers, may be influenced to a greater or lesser extent by their background.

HCPs will want to assess each woman's background—if they are newcomers, their place of birth, how long they have been in Canada—and their support networks.¹ It is important to understand how the woman's culture influences her unique needs, hopes, and postpartum expectations. Even when the necessary services are available and they are made aware of them, immigrant women may face language barriers and difficulties in access because of differences in cultural practices and expectations.²

Most women who are newcomers to Canada face challenges of some sort:²

- The Canadian health care system may feel foreign and strange, and they may have different expectations from those of their HCPs.
- They may not know about the available supports in the health care system.
- They may not share a common language with available HCPs, and their communities may not have access to culturally sensitive health care or translation services.

Each family is unique; they adapt their cultural traditions and practices to their own experience and needs, and they will interpret the parameters of the Canadian health care system within this context. As such, it is important to assess each situation individually. While HCPs may not always agree with certain cultural practices, respecting families' needs and decisions is paramount. Listening to the women's and families' stories about their own culture, childbearing practices, and needs helps accomplish this approach.¹ *Giving Birth in a New Land: Strategies for service providers working with newcomers* suggests specific strategies that promote family-centred, culturally competent postpartum care.³ HCPs can use these to engage in a dialogue with women and families and learn about their values and beliefs and how these apply to their situation.

HCPs need to consider the personal values they bring to their relationship with families. Cultural competence includes working collaboratively with families and communicating effectively.

Communication with families from different cultural backgrounds involves not only translating words, but also understanding subtle variations in meaning, style, volume, and gestures.¹ As such, it is important to find the best possible interpreter for the specific situation. Interpreters must be trustworthy regarding access to private information and, ideally, have specific health-related language skills. Using children or other family members as interpreters is not recommended.

QUESTIONS TO FACILITATE COMMUNICATION ABOUT VALUES AND BELIEFS^{1,3}

If families are newcomers to Canada, ask about their place of birth, how long they have been in Canada, and their support systems. To ensure that women have an opportunity to express their needs, helpful questions include:

- How is health care different in your homeland or culture?
- What do you and your family believe you should do to remain healthy postpartum?
- What are the things you do to improve your health and the health of your baby? What can't you do?
- Do you have beliefs about caring for your baby and yourself that I need to know about?
- Do you have any practices and faith rituals to do with your role as a mother?
- Are there any specific foods that you might eat/drink (or prefer to avoid)?
- Are there any home remedies that you may use during the postpartum period?
- Who do you want involved in decision-making?

Adapted from *Giving Birth in a New Land: Strategies for service providers working with newcomers* (2014), and *Maternal Child Nursing Care Canada* (2017).

1.2 CARING FOR INDIGENOUS WOMEN, NEWBORNS, AND THEIR FAMILIES

The history of residential schools and colonization, which caused the loss of traditional values and practices, languages, and family/community kinship, continues to affect Indigenous women, families, and communities. Indigenous Peoples have poorer health outcomes and higher rates of poverty, food insecurity, and unsafe and overcrowded housing. These social determinants of health take a toll on the physical, emotional, mental, and spiritual health of Indigenous women in Canada.

The health and well-being of many Indigenous women and families have been further undermined by racism, sexism, and culturally inappropriate or inaccessible health services—which also affect Indigenous women and their babies during the postpartum period.⁴⁻⁶

Indigenous women in Canada are diverse in their culture, ancestry, beliefs, and practices. Each Indigenous community has its own traditions, values, language, and communication styles. Many Indigenous women want to incorporate their cultural and societal values and beliefs into their lives and parenting. Integrating cultural safety in the care of Indigenous women during the postpartum period involves providing an environment of respect and open communication, which is consistent with the principles of family-centred care. Indigenous women, as all women, need to feel safe in order to build a trusting relationship with their HCPs.

HCPs should engage with, and familiarize themselves with, the community and work with women to understand their individual values, beliefs, and needs.⁷

An Indigenous doula can assist in honouring traditional and spiritual practices and beliefs associated with postpartum care and support the woman and her family's language and cultural needs while providing emotional and physical assistance during pregnancy, labour, and the postpartum period.⁸

Indigenous women may have to leave their communities to give birth in larger centres. Being away from their families and support systems affects their postpartum experience, including breastfeeding, and recovery. It is important to consider their needs and re-connect them with families and communities as quickly as possible.

Indigenous-specific postpartum and parenting programs are ideal—particularly group formats that allow Indigenous women to meet each other and develop supportive friendships during their pregnancies. Programs that support Indigenous fathers so that they feel equipped to help their partners and children are also necessary. Better systems of referrals and communication between different services and organizations would ensure continuity and comprehensiveness in care.⁹

Training and Education of Healthcare Providers

There is a need for better training of HCPs on how to create culturally safe, stigma-free, and respectful care for Indigenous mothers, babies, and families during the postpartum period.⁹ A nationwide survey of residents and program directors of all accredited obstetrics and gynecology residency programs in Canada demonstrated a lack of curriculum and a significant deficit in knowledge in Indigenous women’s health.¹⁰ As a result, a nationwide curriculum initiative is underway for residents and other health care practitioners. This will facilitate the provision of education in Indigenous women’s health while decreasing the burden on individual programs.



1.3 CARING FOR LGBTQ2 FAMILIES

Family-centred maternity and newborn care is based on individual needs and a mutually respectful and trusting relationship. While progress has been made in providing equitable health care to the LGBTQ2 communityⁱ, these families often continue to face barriers in health care.

People in the LGBTQ2 community identify 3 major barriers when dealing with the health care system—invisibility, lack of information, and negative beliefs. Invisibility refers to the fact that they do not see themselves in the institutions/ programs—for example, the posters on the walls, the forms they complete—or in conversations with HCPs. The HCPs they encounter often do not understand their experiences as an LGBTQ2 family, their unique and diverse needs, and may have negative beliefs about them.¹¹

Sexual minority women (including lesbian, bisexual, and other non-heterosexual women) have a greater prevalence of depression and depressive symptoms compared with heterosexual women, likely because of the impact of sexual orientation-based discrimination, stigma, lack of social support and exposure to additional stress due to heterosexism from their families and some HCPs.^{12–16} Invisible sexual minority women (i.e., women who have a history of sexual relationships with women but are currently partnered with men) are at higher risk for postpartum depression than both visible sexual minority women (women partnered with women) and heterosexual women.^{14,17}

ⁱ The acronym *LGBTQ2* is commonly used to include people who identify their sexual orientation as lesbian, gay, bisexual, queer or questioning, and/or who identify their gender identity as transgender. These guidelines recognize that sexual orientation and gender identity exist along a continuum that may change over time, and that the LGBTQ2 community is diverse.³³⁴

Ongoing education for HCPs on the unique needs of LGTBQ2 families is essential to improving the health care LGTBQ2 families receive.¹⁸ HCPs caring for LGTBQ2 families will want to confront any negative beliefs they may have and aim for ease in approaching the topics of gender, sexuality, and families. It is important that HCPs reflect on their beliefs about LGTBQ2 people and be willing to challenge these beliefs to develop their practice.¹¹

HCPs can facilitate inclusivity when caring for LGTBQ2 families, including during the postpartum period, by:¹¹

- Paying attention to words and language. Words can empower people and they can hurt.
- Being aware of non-verbal communication and tone of voice—these express emotions and attitudes.

- Using non-biased, inclusive language and open-ended questions.
- Asking questions that express openness to all families—and not making assumptions about gender identity, sexual orientation, or behaviour.
- Making sure forms and questionnaires are inclusive.
- Ensuring that visuals, such as posters, in a clinic or program area signal acceptance of diversity.
- Posting a non-discrimination policy and communicating an environment of respect.



2 POSTPARTUM CARE IMMEDIATELY AFTER CHILDBIRTH (BIRTH TO 2 HOURS)

2.1 INTEGRATED CARE OF THE MOTHER AND BABY

The mother and newborn should be considered a unit during the immediate postpartum period (0–2 hours). It is important to avoid disrupting this close relationship during these crucial few hours and to encourage skin-to-skin contact between the baby and the mother (or partner if the mother is unable). The International MotherBaby Childbirth Organization refers to this as *motherbaby care* to emphasize the importance of recognizing that mothers and babies are a unit.

The parent–baby bond—the first step in the baby’s subsequent attachments—is formative to a child’s sense of security and has long-lasting effects.¹⁹ Having early physical contact with the baby can affirm parents’ sense of accomplishment and promote their self-confidence as parents. Keeping babies and parents together is of the highest priority. Institutional policies should only disrupt this contact in the event of a necessary, evidence-based medical reason.

All major organizations concerned with newborn health, including the Society of Obstetricians and Gynaecologists of Canada (SOGC), the Breastfeeding Committee for Canada, the Canadian Paediatric Society (CPS), the Canadian Association of Midwives, the American Academy of Pediatrics, the World Health Organization (WHO), and the United Nations Children’s Fund (UNICEF), recommend that healthy babies have direct skin-to-skin contact with their mothers immediately following birth. Skin-to-skin contact involves placing the newborn babies on their mothers’ bare chest immediately after she gives birth, covering the baby with a blanket, and ensuring that contact is uninterrupted for at least an hour or at least until the first feeding is completed or the mother wishes.²⁰ It is essential to prepare mothers for skin-to-skin contact before birth. Since some cultures may not practise this contact, information, encouragement and support are called for.

Being held by their mother helps the baby normalize his or her temperature, breathing, heart rate, and blood sugar and reduces the pain of medical procedures. Babies who have skin-to-skin contact interact more with their mothers and cry less than those who do not have this contact.²¹⁻²³ The vast majority of babies go to the breast within an hour of birth if they are kept skin-to-skin with their mother. Mothers are more likely to breastfeed in the 4 months postpartum and tend to breastfeed for longer if they have early skin-to-skin contact with their babies.²² Nevertheless, skin-to-skin contact is important for all mothers and babies regardless of the mother’s decision about feeding. If the mother herself is unable to have skin-to-skin contact with her baby, she should choose another person to hold, warm, and comfort the baby, for example, her partner or another family member.



HCPs can demonstrate respect for the family by interfering as little as possible during interactions between the mother and baby. Observations, assessments, and interventions can be completed with minimal intrusion, while skin-to-skin contact is maintained. Anything that is not essential to the immediate well-being of the baby or mother can wait for 2 hours or after the first breastfeeding. Even medically necessary procedures can be done while the baby remains in skin-to-skin contact as long as it is medically safe to do so.^{23,24}

Skin-to-skin contact should continue during transfer from the birthing unit to the postpartum unit or neonatal intensive care unit (NICU).²⁵ At this time, babies should be observed for abnormal respiratory effort, colour, activity or tone—signs of instability that call for urgent evaluation. Separating a mother from a baby requiring special care can make adjustment to motherhood more difficult, and HCPs are called upon to provide even more intensive support at such times. There are continued benefits to skin-to-skin contact past the immediate first few hours of birth, as well as benefits to initiating skin-to-skin contact later, if this was not possible immediately following birth.^{23,24,26}

In some Canadian and European centres, preterm babies stay with their parents during assessments, and couplet care is practised within the NICU.²⁷ Many centres are advocating for skin-to-skin contact, even of very preterm, ventilated, and low birth-weight babies, because of the clinical and psychological benefits to both baby and parents.²⁸

FAMILY-INTEGRATED CARE IN THE NEONATAL INTENSIVE CARE UNIT

Recent Canadian research has found that a family-integrated care (FICare) model of care for preterm babies in neonatal intensive care units (NICU) is feasible and safe in the Canadian health care setting and results in improved weight gain by these babies. The FICare model of care, which is based on the original work of Dr. Adik Levin in Estonia, also has the potential to improve other short- and long-term outcomes for babies and families.²⁹

In this model, parents provide most of the care for their baby, while nurses and other HCPs guide and counsel parents.^{29,30} FICare is more than just the physical setting; the model recognizes that parents are the primary caregivers and decision-makers for their babies. FICare can be accomplished even in older units, and HCP teams are expected to adapt to that reality whenever possible.

Innovative examples of this model of care in Canada include the following:

- BC Women's hospital offers intensive care for newborns and postpartum care for mothers in the same room. Mothers are able to recover from vaginal or caesarean births and pump breast milk without leaving their babies. All newborn babies have their own sound-proofed rooms, and 12 of the 70 rooms are spacious mom-and-baby rooms equipped with a breast-pumping station, reclining chair, and hospital bed for the mother as well as an incubator and infant-monitoring machines. The mom-and-baby rooms are for babies born at 33 weeks or later at low risk of complications.
- In Nova Scotia, the IWK Health Centre is caring for mothers and babies together in their NICU. Each room has a full setup to care for a baby as well as a suite for the family to stay in. The family is given a double bed, a closet with a safe, and a private washroom with a shower. Babies are continuously monitored and, if an alarm is triggered, a signal is sent to a nurse's smartphone. The rooms are also equipped with everything from milk fridges to special sinks that help families bathe their babies. Rooms without windows have skylights that mimic clouds in the sky, and every room has artwork.

In the event of a caesarean birth, it is important to provide all possible opportunities for immediate (defined as within 5 minutes) and uninterrupted skin-to-skin contact as well as breastfeeding when babies cue to feed. This can be done in the operating and recovery rooms. In fact, skin-to-skin care should be considered the norm for caesarean births in the operating room, decreasing the need for early supplemental feedings.³¹

It is important to provide time alone for the family in those critical first hours, with opportunities for both parents to interact with the baby in the birth and recovery rooms. Parents should be encouraged to spend as much time as possible with their baby, including in the NICU, ideally while rooming-in together. If the woman's partner chooses not to be present for the caesarean birth, the family should be re-united as soon as possible.³²

2.2 CARE OF THE MOTHER

The immediate postpartum period is a time of joyful celebration for the vast majority of families, but it is also a time of considerable physiological adaptation for the mother—and for the baby. As such, careful observation and, at times, intervention is required.

Women have different responses on giving birth. Some feel excited, uplifted, and energetic. Others are exhausted and want to sleep. A woman's response may depend on the length, difficulty, and pain during labour, blood loss, anesthesia/analgesia, complications, and whether she had an operative vaginal birth or caesarean birth. Another determining factor is the woman's experience of labour and birth compared with her expectations of these events.

Physical adjustments in the immediate postpartum period—including blood loss, weight loss, and displacement of internal organs—require a significant expenditure of energy. Immediate postpartum care centers on the need for hydration, nutrition, and rest. It is a time to replenish energy.

Begin each postpartum contact by asking the woman how she feels, physically and emotionally, and identifying any concerns that she may have. The physical observation of the mother at each postpartum contact should be individualized and guided by her unique history and situation. The assessment can include the following, depending on the mother’s feelings, sensations, and expressed needs:²⁴

- Vital signs (temperature, pulse, respiratory rate, blood pressure);
- Uterine tone and condition of perineum;
- Lochia;
- Bladder and bowel function;
- Breasts and nipples;
- Physical comfort;

- Emotional and psychological response to labour and birth, for the woman and her partner. Starting this conversation is particularly important in certain circumstances (e.g., when the baby is sick, the mother had complications, or the birth did not go as planned);
- Skin-to-skin contact with baby; and
- Learning needs.

Document the findings according to the institution’s policy.

2.3 CARE OF THE NEWBORN

The baby’s transition to life outside the uterus involves:

- Establishment of effective respiration and circulation;
- Maintenance of an adequate body temperature;
- Contact with his/her mother and family; and
- Initiation of feeding.

POSTPARTUM HEMORRHAGE

Postpartum hemorrhage is the most common complication in the immediate postpartum period. It affects approximately 6% of women globally and is the leading cause of maternal mortality worldwide.³³ In Canada, a diagnosis of postpartum hemorrhage was associated with 1.6 maternal deaths per 100,000 hospital births from 2002 to 2010.³⁴ From 2006 to 2010, it was the second most common severe maternal morbidity, at a rate of 465.4 per 100 000 hospital births.³⁴

Postpartum hemorrhage is defined as blood loss of more than 500 mL during vaginal birth or more than 1000 mL during caesarean birth. The primary cause of immediate postpartum hemorrhage is uterine atony. Other causes include uterine rupture, morbidly adherent placenta, and uterine artery extension/laceration during caesarean birth.

Refer to the Society of Obstetricians and Gynaecologists of Canada (SOGC) guideline *Active Management of the Third Stage of Labour: Prevention and treatment of postpartum hemorrhage*.³⁵

Postpartum hemorrhage has many implications for the woman, including orthostatic hypotension, anemia, fatigue, and fear—all of which affect her ability to care for herself and her baby. It may also result in a lack of immediate skin-to-skin contact with her infant and an increase in the risk of postpartum depression. A blood transfusion may be necessary, which has risks.^{36,37} Delayed, or secondary, postpartum hemorrhage (between 24 hours and 6 weeks postpartum), may occur after the woman and baby have been transferred to a postpartum unit or at home.

It is important to educate women of the signs and symptoms of concern relating to delayed postpartum hemorrhage before discharge and after a homebirth.

The postpartum period is a critical transition time for the baby. This period requires thorough and ongoing assessment and monitoring. An initial, head-to-toe examination of the baby in the birthing area ensures that he or she is adapting to the extrauterine environment. This examination would also identify any abnormal clinical findings. These observations can be completed when the baby is skin-to-skin, which promotes intimacy while helping to maintain a calm environment.

Neonatal Resuscitation

The Neonatal Resuscitation Program (NRP) acknowledges that at least 90% of newborns are vigorous, term babies who do not need to be separated from their mothers for the initial steps of resuscitation. Care for these babies includes:

- Managing the umbilical cord (i.e., avoidance, where possible, of immediate clamping);
- Providing warmth by encouraging direct skin-to-skin contact, ideally with the mother;
- Drying the baby's skin with a warm, dry towel, stimulating breathing, and repositioning the head to open the airway;
- Clearing mucus from the upper airway, if necessary, by wiping the baby's mouth and nose; and
- Ongoing observation of breathing, heart rate, activity, and colour.³⁸

Refer to NRP guidelines for the management of specific clinical situations.^{23,39}

HCPs obtain skills in neonatal resuscitation through NRP training coordinated by the CPS, which has set the educational standards for Canadian practice. The Society recommends that an individual trained in neonatal resuscitation be assigned to this role at every birth. The CPS also recommends that all personnel likely to care for babies at birth have training and registration at the Provider or Instructor level and undergo periodic re-registration.³⁹



While the primary care provider at the birth is responsible for the woman's care, a second HCP should have the primary role of assisting the baby through transition—one able to provide positive pressure ventilation and perform chest compressions, if necessary.³⁸ Another person with the skills to perform a complete resuscitation (including intubation and chest compressions) should be readily available to assist.^{38,40}

The CPS also advises that local/regional health authorities have in place a program that supports the implementation of current neonatal resuscitation guidelines, educational programs for HCPs involved in care during labour and birth, and policies that take into account the educational needs, roles, and responsibilities of professionals involved in care during labour and birth/care of the newborn.

Neonatal Stabilization

A proportion of newly born babies are identified as at risk or unwell during the minutes or hours following birth, often due to prematurity or poor cardiorespiratory transition. All delivering facilities and practitioners should have a plan that addresses these babies' clinical needs (such as respiratory support or glucose management), communication with referral centres, and support of the family.

The CPS's Acute-Care of at-Risk Newborns (ACoRN) program specifically addresses the needs of babies who are challenged by the transition to extrauterine life. Facilities may find this program useful in preparing for the possibility that a newborn is unwell or at risk.



3 EARLY POSTPARTUM CARE (AFTER 2 HOURS)

The key goals of early postpartum care are to:

- maintain and promote the health and well-being of mother and baby;
- support the mother in caring for herself and her baby;
- foster attachment between the baby and the mother, her partner, and other significant family members;
- support the physical and psychological adjustment of the mother and her partner, the baby, and the family; and
- promote effective feeding.

Every postpartum interaction should be carried out in accordance with the principles of family-centred care, basing care and support on evidence of individual needs and not routines.

The benefits of skin-to-skin contact continue through the early postpartum period, facilitating attachment, increasing the duration of breastfeeding, and decreased crying and expression of pain during procedures such as heel prick blood sampling.²³ Although no national guidelines on labour, birthing, and postpartum rooms exist, the Provincial Council for Maternal and Child Health (PCMCH) recommends that mothers who give birth in hospital have a spacious room, preferably a private one, where they can labour, give birth, and stay with their babies until discharged. Rooming-in 24 hours a day should be the norm for all mother–baby dyads unless there is a justifiable reason for

separation.²⁰ As many interventions as possible should occur in the mother’s room to avoid separation. Admissions to nurseries should be based on established criteria and guidelines—and be the exception rather than the rule.²³

A personalized postpartum care plan should be developed in partnership with the mother and her family as soon as possible following the birth. It includes:²⁴

- the mother’s concerns and needs;
- important factors in the pregnancy, birth, and immediate postpartum period;
- assessment of infant feeding;
- the names and contact information of the professionals involved in the mother’s and baby’s care; and
- planned follow-ups/appointments with HCPs for mother and baby during the postpartum period.

The plan needs to be reviewed and adjusted with the mother and family after every postpartum interaction.

Each mother should be assigned an HCP who is responsible for coordinating the care of the family and their transition into the community. This HCP consults with others, as necessary, as the needs of the mother and baby evolve. When birth takes place in hospital or a birthing centre, it is critical that systems, policies, and protocols ensure families are discharged only after follow-up care in the community is established.^{41,42}

Optimal family-centred care during the early postpartum period requires seamless continuity of care and information-sharing between HCPs. How this is accomplished depends on the type of provider and the jurisdiction. Successful coordination of early postpartum care depends upon clear communication between institutions, community HCPs, and families. Hospitals, birth centres, physicians, nurse practitioners, and midwives need a strategy to facilitate effective communication of health information as mothers and babies transition into the community. A comprehensive discharge summary or maternal-newborn passport program may be useful. Secure electronic communication facilitates this process.⁴³

The Breastfeeding Committee of Canada and WHO recommend assessing newborn babies for breastfeeding issues within 24 to 48 hours of discharge from a hospital/birthing centre with routine follow-up of all mothers within 48 hours of discharge;^{20,44} this care may be provided by the hospital, community health centre, a breastfeeding clinic, midwife, etc.

Most newborn care guidelines recommend that an HCP assess the mother and baby during the first week of life.⁴⁵ The American Academy of Pediatrics specifies that this assessment takes place 48 to 72 hours after discharge if discharge occurs less than 48 hours following birth.⁴⁶ The CPS states:

“At time of discharge, infants must have an appropriate follow-up plan in place that includes: contact information for a primary health care provider; a scheduled follow-up visit 24 h to 72 h post discharge—in hospital, clinic or at home—with a qualified health care provider. Hearing and newborn screens have been scheduled (if they were not conducted in-hospital); appropriate follow-up for jaundice; vitamin D supplementation if breast-fed; other follow-up, as required.⁴⁵”

Even though the same principles and philosophy of care underpin all postpartum care, postpartum services should be organized locally to maximize effectiveness and efficiency for women and their babies.

3.1 HOSPITAL BIRTHS: LENGTH OF HOSPITAL STAY AND DISCHARGE

In 1993, the average length of stay after a vaginal birth was 3.2 days, decreasing to 2.0 days by 2012.^[5] During the same period, the length of hospital stay following Caesarean birth decreased from 5.0 days to 3.4 days. The safety of a shortened hospital stay (averaging 2.2 days in 2017/2018⁴⁷) has been debated with regards to the needs of the mother and particularly the newborn. What research says about shorter hospital stays can differ from various organizations’ guidelines for both mother and baby.^{48,49}

Each family needs to discuss with their HCP the risks and benefits of a stay that is shorter than the institutional standard. Base this discussion on the baby’s and the mother’s needs and not on routine policies. From the perspective of family-centred care, leaving the hospital as early as possible has a number of potential benefits: the opportunity for the entire family to get to know the baby together, resulting in greater attachment; more involvement for the partner and less sibling rivalry; better rest and sleep for the mother in her own environment, without constant interruptions from hospital staff; reduced exposure of mother and baby to hospital-acquired infections; and greater confidence on the mother’s part in her ability to care for her baby.⁴⁹

A shortened hospital or birthing centre stay is favoured by: the physiological stability of the mother and baby; family readiness to care for the baby at home; and a greater level of community, family, and institutional support upon discharge. In all situations, including those where mothers and babies are discharged early, mothers need to understand the signs of potential problems. In addition, it is important that the family knows where and when the mother and baby will next see an HCP and who they can contact with any questions.

The Canadian Medical Protective Association (CMPA) recommends reviewing test results and looking for signs of postpartum complications (e.g., infection, hemorrhage, excessive pain, bladder distention, difficulty walking) before discharging the mother and baby. The family should receive clear written or verbal instructions describing the steps and precautions to take when there are concerns, as well as the symptoms or signs that indicate that further medical attention is necessary.⁵⁰

Women and families should be told about community programs for postpartum care and peer supports for themselves and their babies—what they are, where they are located, and how to access them. These may include home-visiting programs, clinics, community-based programs and telephone support. Since it may be difficult for new mothers to remember all of the information shared with them, it is best to provide written information and also make it available on the facility’s website.

Regularly reviewing communication and coordination mechanisms will help to ensure a consistent and effective transition into the community and follow-up for the mother, baby, and family. The question of how best to arrange mother and baby’s discharge is an opportunity to revisit institutional and community resources for new families.

Refer to the following CPS guidelines related to infant discharge:

- *Facilitating Discharge from Hospital of the Healthy Term Infant*
- *Safe Discharge of the Late Preterm Infant*
- *Going Home: Facilitating discharge of the preterm infant*

At-risk babies, including those born late preterm babies, or those who are low birth-weight, are at risk for multiple complications including poor feeding and weight gain, hypoglycemia, and jaundice. Discharge should only be considered once the baby is stable.

“ **The family should receive clear written or verbal instructions describing the steps and precautions to take when there are concerns, as well as the symptoms or signs that indicate that further medical attention is necessary.** ”

3.2 CARE OF THE MOTHER

Care and support during the early postpartum period should enable the mother to take charge of her own health and that of her baby—and to become confident in her ability to care for herself and her baby. This assumes that she is an autonomous adult and that HCPs have confidence in her ability to be a partner in her own care. Her values, situation, and needs are unique.

The Mother’s Well-being and Needs

Begin each postpartum contact with the mother and family by asking the woman how she feels, physically and emotionally, and identify any concerns she may have. Topics to explore include her experiences with her baby, breastfeeding/feeding, how much rest she is getting, and any pain or discomfort she may be experiencing. A physical examination may be performed as needed. The mother’s care is aimed at maintaining her health and helping her adapt to her new role as a mother.

Women need information, advice, and reassurance about postpartum physiological adaptations—such as normal lochia, perineal healing, incision healing (following caesarean birth), and changes to the breasts and nipples. They also need information on any potential issues, such as infection, hemorrhoids, cramping, constipation, urinary incontinence, painful urination, perineal pain and hygiene, headaches, back pain, pain medication, anemia, late postpartum hemorrhage, separation of the abdominal muscles, and breastfeeding challenges. The emotional and social changes she is likely to experience as a result of becoming a parent also require discussion.

SIGNS AND SYMPTOMS OF CONCERN²⁴

Signs and symptoms	Condition
<ul style="list-style-type: none"> • Sudden heavy bleeding or a persistent increase in blood loss • Dizziness, palpitations/tachycardia, loss of consciousness 	<ul style="list-style-type: none"> • Postpartum hemorrhage • Late postpartum hemorrhage
<ul style="list-style-type: none"> • Fever, chills, increased heart rate, abdominal pain and/or foul-smelling vaginal discharge, uterus tender to touch 	<ul style="list-style-type: none"> • Infection: endometritis, urinary infection
<ul style="list-style-type: none"> • Headache within 72 hours of childbirth, accompanied by: <ul style="list-style-type: none"> > Visual disturbances > Nausea and vomiting 	<ul style="list-style-type: none"> • Preeclampsia/eclampsia • Spinal headache after regional anesthesia
<ul style="list-style-type: none"> • Pain in one calf, redness or swelling • Shortness of breath or chest pain 	<ul style="list-style-type: none"> • Thromboembolism
<ul style="list-style-type: none"> • Difficulty walking or standing 	<ul style="list-style-type: none"> • Possibility of symphysis dysfunction
<ul style="list-style-type: none"> • Persistently low mood and/or loss of interest; accompanying low energy; sleep and appetite disturbances; negative thinking patterns; thoughts of self-harm and suicide 	<ul style="list-style-type: none"> • Symptoms of postpartum depression
<ul style="list-style-type: none"> • Engorgement, cracked nipples, breast tenderness, redness, heat, and fever 	<ul style="list-style-type: none"> • Breastfeeding problems; mastitis

HCPs will want to provide clear and consistent information and advice that is tailored to the woman's individual needs and concerns. If the woman has a partner, he or she is a central figure in the family and should take part in conversations with consideration given to his or her needs. The psychosocial context of some situations may require particular attention, for example, support for single mothers, mothers in difficult socioeconomic situations, mothers who are new to Canada or who are refugees, mothers with psychosocial concerns identified during pregnancy, or teen mothers.

“ The mother's care is aimed at maintaining her health and helping her adapt to her new role as a mother.

Mother's Adjustment and Emotional Health

Research shows that the mother's emotional adjustment affects her well-being as well as that of the baby and the family.⁵⁴ Mothers may experience a range of emotions postpartum, including baby blues, depression, anxiety disorders, obsessive-compulsive disorders, trauma and stressor-related disorders, and postpartum psychosis.

Compassion and vigilance are the key approaches to effective support for the new mother and family during this period of transition. HCPs will want to attune themselves to the thoughts and experiences of new mothers and their partners in order to help them explore their feelings and emotional health, rather than rely on tasks or checklists. As always, the goal is to empower the mother in her own capacity to adjust and adapt.

The Canadian Task Force on Preventive Health Care guideline *Recommendations on Screening for Depression in Adults* does not recommend screening of adults by population subgroup, including perinatal and postpartum women, who may be at increased risk of depression. They recommend that clinicians remain alert to the possibility of depression, especially in individuals with characteristics that may increase the risk for depression, and be attentive when there are clinical clues. The Task Force does not have guidelines on screening for other areas of emotional health and mental illness.⁵²

Other organizations, such as the Registered Nurses' Association of Ontario (RNAO), the Ontario Provincial Council for Maternal and Child Health, Perinatal Services BC, and the US Preventative Task Force, do recommend screening pregnant and postpartum women for depression.^{42,53-55}

It is important that HCPs develop assessment skills to monitor symptoms for mental disorders and stay alert for signs of concern so they can provide appropriate information and support. Providers need to be aware of the various types of responses and sufficiently knowledgeable about emotional health to identify psychiatric disorders in the immediate postpartum phase and beyond (as these disorders do not always present in early postpartum).

Caesarean Birth

Caesarean births are common—in 2016/17, 28% of all births in Canada were by caesarean births. These rates range from 18.5% to 35.3% across the provinces and territories.^{56,57}

Mothers and families who have an emergency caesarean birth after a long and difficult labour have special needs. They may be experiencing depression, anxiety, guilt, sense of loss of control, less satisfaction with the birth experience, and loss of self-esteem.⁵⁸ Mothers and families who undergo planned, scheduled caesarean births can use coping mechanisms to prepare for the surgery; women undergoing an unplanned caesarean birth do not have this preparation

time.³² If a woman has an unplanned caesarean birth but feels respect and compassion and that her caregivers are collaborating with her during her labour, her outcomes will likely be optimized. If a woman has an unanticipated caesarean birth and is not supported, she could develop posttraumatic stress disorder (PTSD).⁵¹ HCPs are well-positioned to help mothers and their families resolve their feelings about the caesarean birth, and connect families to support and services in the community, if needed.

Women who have a caesarean birth need more care and support in their postpartum recovery and greater support caring for themselves and their babies. They experience higher levels of fatigue, constipation, depression, anemia, headache, difficulty voiding, abnormal bleeding, urinary tract infection, abdominal pain, and vaginal discharge than women who have a spontaneous vaginal birth. Primarily because of pain, mothers may need extra help with breastfeeding, especially during the first few days, and they have increased difficulties caring for their babies due to painful or reduced mobility.⁵⁹ It is vital that women and their partners/families understand what to expect during the recovery period, such as the importance of rest, fluids, support for mobility, and adequate diet for recovery. They also need to plan for support with lifting, driving, and household chores.

The average length of hospital stay is longer for women who have caesarean births than for those who have vaginal births. Family support is imperative after a caesarean birth. Mothers and babies should be cared for as a unit, with her partner, if available, including in the NICU.



3.3 CARE OF THE NEWBORN

During the early postpartum period, care of the newborn usually involves celebrating and rejoicing with the family and respecting and supporting their needs. The care is based on nurturing the developing mother–baby–family relationship and caring for mother and baby as a unit. It includes asking the mother and her partner about their concerns and feelings, observing the baby, and supporting his or her health and well-being.

HCPs will want to ensure that the information and advice they share is clear, consistent and tailored to the mother’s specific needs. By focusing on the expressed concerns of the family, rather than on predetermined teaching lists, HCPs will avoid overwhelming them with information. Opportunities to share information about the health and care of babies, including signs of concern, are maximized by caring for mother, baby, and the family together. The mother or partner should be present any time the newborn is being examined, and then made aware of the findings.

There are no Canadian guidelines on the development of newborn care plans. The National Institute for Health and Care Excellence (NICE) and the American College of Obstetricians and Gynecologists (ACOG) recommend developing a documented, individualized postnatal care plan with the woman, ideally in the antenatal period or as soon as possible after the birth. The plan would list the HCPs involved in her and her baby’s care, including their roles and contact details. NICE and ACOG recommend that parents be offered information and advice to enable them to assess their baby’s general condition, identify signs and symptoms of common health problems in babies, and contact an HCP or emergency service if required.^{24,60}

For babies born in hospitals or birthing centres, the length of their stay varies from a few hours to about 72 hours. Appropriate postpartum follow-up, including a physical examination by a skilled HCP

is essential. This physical examination should include observing feeding. The CPS guideline *Facilitating Discharge from Hospital of the Healthy Term Infant* provides recommendations for discharge and newborn follow-up.⁴⁵

Midwives carry their own caseload and follow their clients regardless of place of birth. They commonly provide three home visits during the first weeks of life.

Baby-friendly Environment and Exclusive Breastfeeding

Breastfeeding is recognized as the unequalled way to provide optimal nutritional, immunological, and emotional nurturing of infants.^{61–65} Consistent with WHO global recommendations, Health Canada recommends exclusive breastfeeding for the first 6 months that is sustained for up to 2 years or longer with appropriate complementary feeding. This is important for the nutrition, immunologic protection, growth, and development of infants and toddlers.⁶⁶

It is also important that hospitals, birthing centres, and community health facilities protect, promote, and support breastfeeding, strive for Baby-Friendly status, and achieve the Ten Steps to Successful Breastfeeding.

Infant Mental Health

Infant and early childhood mental health has been defined as “the infant’s/young child’s capacity to experience, regulate, and express emotions, form close and secure relationships, and explore the environment and learn.”^{19”}

Infants form attachments, learn about social interactions and relationships, take in information from the world around them through their five senses, and as they grow, explore their world. Infant mental health is impacted by a number of factors—biology, genetics, brain development, temperament, the prenatal environment, illness or disability, relationships, attachment, their parents’ mental health, parenting, their environment, the social determinants of health, violence, stress and trauma and resiliency.⁶⁷

The basis for mental health starts early in life. Early experiences, including infants' relationships with parents and caregivers, affect the architecture of their developing brains.⁶⁸ The infant's brain is growing very fast—and nurturing and responsive caregiving is the key to supporting healthy brain development.⁶⁷ Disruptions in this process can influence stress regulation, emotional health and immune system development throughout life.⁶⁸ Infants are totally dependent on their parents and other caregivers, and when parents and caregivers are responsive, consistent, and nurturing, and they live in safe and economically secure environments, their infants are more likely to have strong emotional health.⁶⁷⁻⁶⁹

Parenting and caregiving affect the infant's/ young child's brain development and mental health through a number of mechanisms. One is attachment. When infants are nurtured and looked after responsively by their parents and other caregivers, their physical and mental health is affected for life through the formation of strong, positive bonds with adults—or attachment. Babies who are securely attached demonstrate less anxiety and more positive emotion in young childhood and are more capable of forming relationships with peers and adults.^{67,69}

Consistent, high quality and timely daily routines also shape the baby's developing regulatory system. The predictability and quality of routines influence the biological rhythms related to waking, eating, eliminating, and sleeping.^{67,69}





On the other hand, if babies experience persistent, toxic stress, the architecture of their brains is weakened. This can lead to mental health issues and physical, learning and behaviour problems throughout life. While stress is an important part of healthy development, when babies without supportive relationships experience high levels of stress for long periods of time, the result is toxic stress.⁷⁰

If parents (or other caregivers) struggle with depression or problematic substance use, for example, they may have difficulty being responsive to their infants.^{71,72} Furthermore, if parents have high levels of stress themselves due to precarious economic, housing, or safety conditions, they may struggle to respond to their infants as needed.⁷³ Parents in these situations need particular support.

Optimal growth and development requires a continuum of services for infants, toddlers, and their families, delivered by trained professionals. Early investment can support infant mental health and prevent the need for more expensive interventions down the road.⁶⁷ Developing a strong system of informal and formal services is necessary in order to support parents who are struggling to care for their children. In addition, infants/children who are experiencing abnormal stress need assessment and treatment, along with expert support, before this stress has long-lasting effects.⁷³

Breastfeeding supports neurodevelopment. This may be due to the breastmilk nutrients or the mother–baby interaction—or both. Neuroscientific evidence strongly supports that infants be exclusively breastfed for 6 months and that hospitalized preterm infants either be breastfed or receive breast milk.^{74,75} Consistent with the WHO global recommendation for public health, Health Canada recommends exclusive breastfeeding for the first 6 months that is sustained for up to 2 years or longer, with appropriate complementary feeding to support nutrition needs, for immunological protection and growth and development of infants and toddlers.⁶⁶ Mothers and their families need breastfeeding information and support to encourage exclusive breastfeeding.

Programs that are offered before, during, and after pregnancy as well as during early childhood, have shown benefits for supporting positive infant and child mental health.⁷⁶ These include home-visiting and other family support strategies.

Nobody's Perfect is a facilitated, community-based parenting program for parents of children from birth to age 5. The program is designed to meet the needs of parents who are young, single, socially or geographically isolated, or who have low income or limited formal education. Several studies have shown that participants in the *Nobody's Perfect* parenting program experience increased:⁷⁷

- Confidence in their parenting skills;
- Ability to cope with stress;
- Ability to problem solve;
- Resiliency;
- Self-sufficiency and independence;
- Frequency of positive parent–child interactions;
- Use of positive discipline techniques; and
- Access to peer/social/community support.

While there are no national Canadian guidelines on infant mental health, the CPS position statement *Relationships Matter: How Clinicians Can Support Positive Parenting in The Early Years* offers advice on how physicians can positively affect family health and well-being, support parents, and connect families with community resources.⁷⁸ The Infant Mental Health Promotion coalition from the Hospital for Sick Children has developed best practice guidelines, *Competencies for Practice in the Field of Infant Mental Health*. These outline the knowledge and skills needed to provide competent care.⁷⁹ Best Start has ready-to-use workshop resources for service providers, *Healthy Baby Healthy Brain*, that help parents and expectant parents support their baby's brain development.⁸⁰

Ophthalmia Neonatorum

Prophylaxis for neonatal gonococcal ophthalmia remains mandatory in some provinces and territories. The CPS states that “erythromycin, the only ophthalmic antibiotic eye ointment currently available for use in newborns, is of questionable efficacy.⁸¹” Furthermore, the Society considers that eye prophylaxis is not effective in preventing chlamydial conjunctivitis, and that applying medication to the eyes of newborns may result in mild eye irritation.⁸¹ They no longer recommend prophylaxis for ophthalmia neonatorum but recommend screening all pregnant women for gonorrhoea and chlamydia infection, with treatment and follow-up of those found to be infected. The CPS suggests that mothers who were not screened should be tested at birth, and babies of mothers with untreated gonococcal infection should receive ceftriaxone.⁸¹

The Public Health Agency of Canada (PHAC) states that “all pregnant women at risk should be screened at the first prenatal visit or at the time of delivery if not previously screened,” and provides guidance for the management of ophthalmia neonatorum.⁸²

Skin Care

Mothers look at their baby's skin regularly, and HCPs can help them understand transient benign skin conditions such as acrocyanosis, baby acne, cutis marmorata (mottling), milia, erythema toxicum neonatorum, and dermal melanocytosis (Mongolian spots).^{83,84}

For detailed information on valid and reliable skin assessment tools for babies at risk of impaired skin integrity, refer to the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) guideline *Neonatal Skin Care*.⁸³

It is important to share information about skin creams or barriers with parents. While routine application of skin creams or lotions is not necessary for newborns, petroleum emollients have been demonstrated to prevent dermatitis and skin breakdown without increasing the risk of infection.^{24,83} Barrier creams or ointments can be applied to the diaper area if reddening is noted.

Parents of both newborn boys and girls need to be made aware of how to properly clean and care for their child's genitals. For example, in the case of uncircumcised newborn boys, normal foreskin can remain nonretractile until puberty.⁸⁴

Bathing

Newborn babies are often bathed for aesthetic and hygiene reasons, as opposed to medical indications (i.e., to prevent transmitting certain infectious diseases).^{83,85} Vernix caseosa, the waxy white substance found coating the skin of newborn babies, moisturizes the baby's skin and prevents bacterial cutaneous infections. It should not be washed off, but should be allowed to dry naturally.

The priorities at birth and in the early postpartum period are skin-to-skin contact, breastfeeding, and promoting attachment; the first bath can be postponed. Some families bathe their baby for the first time at home, when the baby is a few days old. Ultimately, “decisions about the frequency of bathing and time of day should be based on the individual baby’s need and consideration of family values and beliefs of the local culture.⁸³”

Newborns do not require daily bathing. Encourage parents to wash their baby with a warm wet cloth between baths, and to wipe the baby’s face and hands frequently.^{83,84}

Umbilical Cord Care

Parents need to be informed about care of the umbilical cord. Natural drying is recommended, that is, putting nothing on the cord. Topical drying agents (including isopropyl alcohol) and antibiotics do not reduce cord separation time or frequency of cord infections, and in some cases, they can harm the newborn.^{24,83,85} Newborns can be bathed with the umbilical cord intact so long as the cord is dried thoroughly afterwards.

Fold down diapers to provide maximum exposure to air and prevent contamination with stool or urine. If the umbilical cord or stump is soiled with urine or stool, the area should be washed with water and dried. Parents need to recognize that fever (38 °C or higher), redness, swelling, drainage (yellow pus), foul-smelling discharge, and bleeding (more than a few spots on the diaper shirt or sleeper) are abnormal findings that they should report to their HCP.^{83,84}



Circumcision

Parents require accurate, up-to-date, evidence-based information about circumcision so they can make an informed choice for their baby. There is considerable controversy in medical communities regarding circumcision. In their position paper, the CPS outlines the benefits and risks, and does not recommend routine circumcision.⁸⁶ According to the American Academy of Pediatrics, the health benefits of newborn male circumcision outweigh the risks. However, the health benefits are not great enough to recommend universal newborn circumcision.⁸⁷ The *Journal of Medical Ethics* has an exclusive edition exploring the medical, religious, and social reasons for and against circumcision.⁸⁸ Religious, cultural, and social factors play an important part in the decision to circumcise male babies—these should be considered and respected.

Early Immunization

In most parts of Canada, routine immunizations are not given to newborns. As of 2014, only New Brunswick, the Northwest Territories, and Nunavut include hepatitis B vaccine as part of the immunization schedule at birth.⁸⁹ PHAC recommends that hepatitis B vaccine be given at months 0, 1, and 6 with at least 4 weeks between the first and second dose, at least 2 months between the second and third dose, and at least 4 months between the first and third dose. Alternatively, it can be given as DTaP-HB-IPV-Hib vaccine, which protects against diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, and *Haemophilus influenzae* type b, with the first dose at 2 months of age.⁸⁹

It is recommended that a baby whose mother has tested positive for the hepatitis B surface antigen (HBsAg) receive hepatitis B immunoglobulin and a vaccine within 12 hours of birth. If the mother’s hepatitis B status is not known, and will not be known within 12 hours of birth, HCPs might consider administering the vaccine and the immunoglobulin based on risk factors, erring on

the side of caution and administering both when uncertain. If the mother is HBsAg negative, it is reasonable to administer the vaccine to babies who may be at increased risk of exposure to HbsAg-positive household members or those at high risk of being positive.⁸⁹

Parents, grandparents, family, and friends who are in regular contact with a baby should have all their recommended immunizations and these should be up-to-date. Anyone requiring a booster vaccine should get it at least 2 weeks before contact with the baby.⁸⁹ This is particularly important for diphtheria, tetanus, and acellular pertussis adult vaccine, as well as for influenza vaccine.

Vitamin D

Cases of vitamin D deficiency still occur in babies in Canada who do not receive vitamin D as a supplement.⁹⁰ Without supplementation, a baby's vitamin D stores will be depleted, particularly if the mother's vitamin D stores are low.^{91,92}

Nutrition for Healthy Term Infants, a joint statement by Health Canada, CPS, Dietitians of Canada, and the Breastfeeding Committee for Canada, recommends a daily vitamin D supplement of 10 µg (400 IU) for exclusively and partially breastfed babies, from birth to 1 year of age. Children aged 12 to 24 months of age who are breastfed or receive breastmilk should continue to receive this daily vitamin D supplement of 10 µg (400 IU).^{66,93} Breastfed babies living in northern latitudes require special attention. In this situation, the CPS suggests that vitamin D supplementation within a range of 400 IU/day to 800 IU/day appears to be safe.⁹⁴

Continuing this supplement is a conservative approach to achieving adequate vitamin D intakes. It also provides a consistent and straightforward public health message. In individual practice, the decision to discontinue the supplement beyond 12 months of age can be informed by a dietary assessment of other contributors of vitamin D, such as cow milk.⁹³



Newborn Screening

Newborn screening has been one of the most successful public health programs of this century. It has achieved the goal of detecting hereditary disorders that can result in death or severe long-term disability if not identified prior to the onset of signs.⁹⁵

Current Canadian standards are set at the provincial and territorial level, resulting in variations in the number of screening tests performed in the general categories of endocrine disorders, hemoglobinopathies, fatty acid, amino acid and organic acid disorders, cystic fibrosis, galactosemia, and other disorders.⁹⁶ HCPs would be expected to discuss screening the newborn with parents before and soon after the birth, emphasizing that this is a routine part of their baby's care that can prevent serious health problems. The newborn screening blood specimen card is completed between 1 and 7 days of age — and ideally between 2 and 3 days of age. If testing is conducted earlier, before 24 hours, repeat the test within 5 days. In Quebec, in addition to blood sampling, a urine sample is obtained at 3 weeks for screening of a number of hereditary conditions.

According to the CPS, all newborns should be screened for hyperbilirubinemia, using a predictive nomogram. The Society recommends measuring bilirubin at the same time as having the metabolic screening test, unless it is required earlier, or at discharge or within 72 hours of birth, whichever comes earlier. This is particularly important if babies go home early, since bilirubin levels will peak at home.⁹⁷

The incidence of critical congenital heart disease (CCHD) in Canada is 3/1000 live births. CCHD accounts for more deaths than any other congenital malformation. Between 10% and 30% of CCHD diagnoses are not made prior to discharge from hospital although early diagnosis and follow-up are essential first steps in preventing infant mortality and morbidity.⁹⁸ Some centres now perform routine pulse oximetry screening to identify babies with CCHD. Used in conjunction with prenatal ultrasound and a physical examination, pulse oximetry screening is the best approach to detecting CCHD in newborns.⁹⁹ The CPS recommends that pulse oximetry screening be performed between 24 and 36 hours after the birth, using the baby's right hand and either foot to minimize false-positive results. The Society recommends that newborns with abnormal results undergo a thorough evaluation by the most responsible HCP. If a cardiac diagnosis cannot be excluded, newborns with abnormal results would be referred to a pediatric cardiologist.¹⁰⁰

Hearing Screening

Hearing loss is not a common disorder in the newborn. Profound hearing loss (>70 dB) occurs in approximately 1 to 3 infants per 1000 live births. Together with moderate loss (>40 dB), the prevalence increases to 6 per 1000.¹⁰¹ Universal screening for hearing results in earlier diagnosis and intervention and improved language outcomes for children.¹⁰² The CPS and Speech-Language and Audiology Canada recommend universal screening for all newborns.^{102,103}

Speech-Language and Audiology Canada recommends that screening be conducted by 1 month of age, in either a hospital or community-based setting. Any suspected hearing loss should be confirmed by 3 months of age, and an intervention implemented by 6 months of age.¹⁰⁴ Screening policies, however, vary between provinces, with some offering universal screening and others screening only high-risk populations.⁹⁶

HCPs will want to discuss the hearing tests with parents and explain the rationale, how they are performed, and the implications of test results that show possible hearing loss. It is also important to explain the efficacy of the test and the occurrence and meaning of false positives.



Pain

Newborns, both preterm and term, have a hypersensitivity to stimuli and are more prone to pain and the consequences of pain. It is critical that they receive effective pain relief. As newborns cannot verbalize, it is up to their caregivers to assess and alleviate their pain. Always keep the number of painful procedures to a minimum; those that are conducted should be evidence-based.

Some effective pain management strategies have been identified for newborns during bedside procedures.¹⁰⁵ Breastfeeding and skin-to-skin contact together are effective at reducing pain, and this is the first line of pain reduction for procedures such as injections, heel lancing, or venipuncture.¹⁰⁶

- Skin-to-skin contact reduces pain responses in preterm and term babies.¹⁰⁷ Skin-to-skin contact should be started approximately 10 to 15 minutes prior to the procedure.¹⁰⁵
- Breastfeeding should be started approximately 5 minutes before the procedure. Ensure that the baby achieves an effective latch with sustained sucking and swallowing.¹⁰⁵ Sweet solutions, including breast milk, have analgesic effects on babies.¹⁰⁸

Refer to the CPS guideline *Prevention and Management of Pain in the Neonate* on bedside procedure pain management as well as surgery and major procedures.¹⁰⁹

“**Breastfeeding and skin-to-skin contact together are effective at reducing pain, and this is the first line of pain reduction for procedures.**”

Safe Sleep

An optimal amount of sleep for both babies and parents is a priority for parents. Deciding where a baby sleeps is personal and highly variable. The decision may be based on cultural or personal values or the desire to facilitate breastfeeding. Alternatively, it may reflect socioeconomic realities such as unstable housing or poverty resulting in a lack of resources such as a crib.¹¹⁰

It is incumbent on all HCPs to work closely with the families to promote safe sleep for their babies. HCPs and parents should discuss the following modifiable risk factors, which reduce the risk of Sudden Infant Death Syndrome (SIDS):¹¹¹

- Breastfeeding of any duration, which provides a protective effect, with exclusive breastfeeding offering greater protection;
- Placing infants to sleep in a crib, cradle, or bassinet—one that meets current Canadian regulations—in the same room and near the parent or caregiver’s bed;
- Providing a smoke-free environment—both before and after the birth; and
- Placing infants on their backs to sleep, for every sleep.

PHAC recognizes SIDS and other infant deaths that occur during sleep as major public health concerns.¹¹¹ According to Statistics Canada, 10 babies aged less than 1 year died from SIDS in 2018.¹¹² While it is important to differentiate between SIDS and accidental suffocation and strangulation in bed, the American Academy of Pediatrics notes that many of the modifiable and non-modifiable risk factors for SIDS and other sleep-related infant deaths are similar.¹¹³

There is some confusion around the meaning of the term “co-sleeping.” Sometimes it refers to sleeping in the same bed and sometimes to sleeping in the same room. Room sharing occurs when the baby and adult caregiver sleep on separate surfaces in the same room—a practice that is recommended.^{111,113} Bed sharing, when the baby and caregiver share the same sleep surface, is not recommended by either CPS or PHAC.

Parental fatigue can play a significant role in creating unsafe sleep environments for babies and, infrequently, extreme parental fatigue can contribute to accidental suffocation.¹¹⁰ A more likely scenario is that parents become so tired that they are less capable of making evidence-based decisions about sleep for either themselves or their babies. HCPs should take a proactive approach when it comes to discussing sleep strategies with parents.

Some parents may be hesitant to reveal their actual sleeping environments to HCPs for fear of reprimand. However, they should be able to make informed decisions about where they intend to place their baby to sleep. The prenatal period is an opportune time for HCPs to bring up safe sleep practices, to inquire about where the parents plan to place their baby to sleep, and to explore factors such as socioeconomic circumstances, cultural practices, and beliefs that may influence safe sleep decisions.¹¹⁴ However, this should not be a one-time event—plan on having multiple discussions with parents on the topic of safe sleep.

Effective care requires a coordinated approach that involves ongoing communication between HCPs, parents, families, and other caregivers. The unique beliefs and needs of each family, and their personal and environmental resources, influence their decisions.¹¹⁵

Refer to the CPS, Canadian Foundation for the Study of Infant Deaths, Canadian Institute of Child Health, Health Canada, and PHAC *Joint Statement on Safe Sleep* for more information.¹¹¹



Growth Monitoring

Monitoring a baby’s growth helps identify health or nutrition problems early enough for corrective action to be effective.^{66,93} Measurement of growth over time should be combined with clinical, developmental, and behavioural assessments. The WHO Child Growth Standards are based on the growth of breastfed babies.¹¹⁶ Standard growth charts show the gradual change in growth velocity.

Babies who are feeding well typically regain their birth weight by 10 to 14 days, double their weight by about 5 months, triple it by 12 months and quadruple it by 2 years of age.¹¹⁷ Babies grow quickly during the first 3 months, gaining 20 to 30 g per day in the first 4 weeks, or an average of 0.6 to 1.4 kg per month.¹¹⁸

At-risk or Unwell Babies

Routine monitoring of newborns should include evaluation and documentation of vital signs, weight, and feeding in addition to routine screening practices. HCPs responsible for newborn babies should be trained to identify abnormal findings and initiate interventions such as glucose monitoring, saturation monitoring, and positive pressure ventilation. The ACoRN program trains HCPs in a *primary survey* of at-risk or unwell babies to identify areas of concern that require attention.¹¹⁹



4 COMPLICATIONS RELATED TO THE MOTHER

4.1 POSTPARTUM MENTAL HEALTH

Transition to parenthood is normally a time of intense emotional adjustment that is compounded by sleep disruptions, fatigue, and anxiety about caring for and parenting a baby. It can also be a period of high risk for the development or recurrence of mental illness in new mothers. During this time, any from the entire spectrum of psychiatric disorders may occur. Concerns about women's mental health are some of the most prevalent problems of the perinatal period. Psychiatric disorders often begin in pregnancy, but onset may also be late into the first postpartum year.

Women with a history of psychiatric disorders are particularly vulnerable, although new onset disorders can occur in any postpartum woman due to the complex interplay of biological, psychological, and social determinants of mental health. Women who have a traumatic birth experience, or women who have ill and/or hospitalized newborns, may be at increased risk of mental health problems.⁵¹ Inadequate support during the postpartum period can also contribute to or exacerbate mental health problems.

The onset or worsening of depression, anxiety, or other mental illnesses can have serious, long-lasting effects on the mother's developing relationship with her baby. Postpartum depression—especially when left untreated, resulting in chronic maternal depression—can lead to social, emotional, and behavioural development problems in children, including issues with conduct, emotion regulation, insecure attachment, and poor cognitive outcomes. The effects also depend on factors such as social and material support.¹²⁰ Identifying postpartum mental illnesses and providing appropriate psychological support and possible psychiatric care is important. At the same time, ensure that other medical conditions, such as anemia or thyroid abnormalities or substance use, are not causing or contributing to the symptoms.

Ideally, an interprofessional team cares for a new mother with postpartum mental illness. This requires integrating and, especially, coordinating care and services where interventions and objectives are chosen with and accepted by the mother.¹²¹ Since postpartum women can experience mental health problems for a long time (more than a year in some cases), having one person coordinate integrated care can help ensure that the care is consistent and ongoing. If the mother agrees, her partner and family may also be involved in decisions regarding her care.

Postpartum Blues

The most common type of postpartum mood change is the postpartum blues, or *baby blues*. Estimates of prevalence range dramatically, from 15% to 84%.¹²² The postpartum blues are thought to be an effect of the rapid post-childbirth hormonal drop on the neurotransmitter systems involved in mood disorders.¹²³⁻¹²⁷ The challenges of caring for the baby and interrupted sleep are also likely to contribute to the blues.^{128,129}

Common symptoms of postpartum blues are low mood, emotional lability, tearfulness, fatigue, and irritability. These symptoms are usually transient, beginning shortly after childbirth and resolving on their own within the first few weeks postpartum.¹²³ The transient nature of the symptoms helps distinguish postpartum blues from a major depressive episode. Other features that distinguish postpartum blues from a major depressive episode are the lack of severe symptoms, such as persistent insomnia, thoughts of guilt or worthlessness, or suicidal ideation. The reason some women have postpartum blues, while others develop major depression is unknown, but research suggests that genetic predisposition is a factor.^{130,131} Postpartum blues are self-limiting and require no treatment other than reassurance and support.¹³² However, early onset, severe, or prolonged blues is associated with postpartum depression, and requires medical attention.¹³³

Postpartum Depression

Postpartum depression can affect a woman at any age or socioeconomic status and from any culture. Biological risk factors may include history of depression or untreated depression in pregnancy, while psychosocial risk factors may include poor social support and stressful life events, including issues related to the health of the baby.¹³⁴ Some women are at a higher risk of postpartum depression such as Indigenous women, younger mothers, sexual minority women, and women who are recent immigrants to Canada.

SUPPORTING WOMEN WITH POSTPARTUM MENTAL ILLNESS⁵¹

Supporting women with postpartum mental illness requires a multifaceted, family-centred approach based on the individual needs and experiences of the woman and her family. Effective treatments for postpartum mental health disorders may require referral to a mental health professional. HCPs can support new mothers and families by:

- Knowing how to differentiate between postpartum depression and other anxiety disorders or mental illnesses, including post-traumatic stress disorder (PTSD);
- Being familiar with risk factors associated with postpartum depression and mental illnesses;
- Being able to identify women at risk of developing postpartum emotional disorders and those in difficulty;
- Recognizing the symptoms of mental disorders, from baby blues to postpartum psychosis;
- Knowing about the range of treatment options available for the various postpartum mood disorders, and providing women and their families ways to access the appropriate resources;
- Helping to debunk the “motherhood equals joy and complete fulfillment” myth; and
- Encouraging women to talk about their negative emotions to do with motherhood.

The *Diagnostic and Statistical Manual of Mental Disorders, version 5* (DSM-5) qualifies a major depressive episode *with peripartum onset* when symptoms start in late pregnancy or within the first 4 weeks postpartum.¹³⁵ However, most clinicians define postpartum depression as depression during the first year postpartum.¹³⁶⁻¹³⁸

According to 2019 Canadian data, almost one-quarter (23%) of mothers who recently gave birth reported depressive and anxiety symptoms that might or might not be postpartum depression or anxiety because these were just very general screening scales. Prevalence of such feelings was higher among mothers aged under 25 years (30%) than all other age groups. Of the mothers who had these feelings, 31% had been told by an HCP that they had depression or a mood disorder before pregnancy. Almost one-third (32%) of mothers who had these feelings reported that they received mental health treatment since the birth of their baby—39% had counselling, 38% medication (such as anti-depressants), and 23% counselling plus medication.¹³⁹ Women with bipolar disorder are at particularly high risk of developing a depressive episode postpartum.¹⁴⁰

Recent Canadian research indicates that First Nations mothers had a 20% increase in the mean scores of depressive symptoms compared to White Caucasian mothers in Canada.¹⁴¹ A systematic review of the evidence on the prevalence of postpartum mental health disorders in Indigenous women confirmed this finding.¹⁴² Chronic life stress and trauma are considered key causes of prenatal and postpartum depression among Indigenous women. This life stress is influenced by racism, sexism, domestic and sexual violence, and intergenerational trauma from residential schools and other legacies of colonization.⁹



SYMPTOMS OF A MAJOR DEPRESSIVE EPISODE¹³⁵

- Persistently low mood and/or loss of interest
- Accompanying low energy
- Sleep and appetite disturbances
- Negative thinking patterns
- In more severe cases, thoughts of self-harm and suicide.

While the symptoms of postpartum depression are similar to those of a major depressive episode outside of the postpartum year, the negative thoughts and images associated with postpartum depression can focus on feelings of failure as a mother, anxiety about the baby's health and well-being, and guilt about having difficulty with the transition to parenthood. While perinatal suicide is extremely rare, as many as 20% of women report thoughts of self-harm or suicide.¹⁴³

The Canadian Task Force on Preventive Health Care guideline *Recommendations on Screening for Depression in Adults* does not recommend screening for depression in perinatal and postpartum women.⁵² However, there are tools that can be used to help detect anxiety and depression in the postpartum period.

Refer to the Registered Nurses' Association of Ontario best practice guidelines for effective interventions when caring for mothers with postpartum depression.⁵³

Anxiety and Related Disorders

Anxiety is a primary feature of perinatal depression, with the prevalence of anxiety symptoms ranging from 14% to 20% in the postpartum period.¹⁴⁷⁻¹⁴⁹ Parents often feel anxious about the welfare of the baby, insecure about their parenting abilities, or worry about being alone. However, women can also have anxiety and related disorders, including generalized anxiety disorder, panic disorder, obsessive-compulsive disorder and PTSD.¹³⁴

The Generalized Anxiety Disorder 2-item (GAD-2) questionnaire is a useful tool for identifying generalized anxiety disorder.¹⁵⁰ The tool has just 2 questions with four possible answers per question:¹⁵¹

“Over the last 2 weeks, how often have you been bothered by the following problems?”

1. Feeling nervous, anxious or on edge?
 - Not at all/Several days/More than half the days/Nearly every day
2. Not being able to stop or control worrying
 - Not at all/Several days/More than half the days/Nearly every day”

New parents are naturally nervous when they are beginning to care for their newborn baby. Generalized anxiety disorder, however, is characterized by excessive worry about anticipated events or activities in a way that is difficult to control or interferes with daily functioning. The anxiety can be clustered worries about finances, appearances, maintenance of household duties, and the well-being of the baby, for example.¹⁵²

Panic disorder, affecting about 1% to 3% of new mothers, may cause significant impairment. It can result in the mother experiencing isolation due to her difficulty in leaving the home or being in groups of people.^{152,153}

Obsessive-compulsive symptoms occur in 4% to 9% of new mothers. These most often include obsessions about contamination, compulsions about checking and ordering, and in some cases, thoughts about the baby being harmed.¹⁵⁴⁻¹⁵⁷ The latter can be distinguished from psychosis because women with obsessive-compulsive symptoms have no intention of harming their child and are significantly distressed by these types of thoughts. Obsessive-compulsive symptoms commonly co-exist with a depressive episode.¹⁵⁵

TOOLS TO DETECT ANXIETY AND DEPRESSION POSTPARTUM

The Edinburgh Postnatal Depression Scale (EPDS)¹⁴⁴⁻¹⁴⁶

This 10-item depression scale:

- Can be used in clinical care or for women at risk of, or showing, symptoms of postpartum depression;
- Can be used any time postpartum, including at regular maternal or baby checks;
- Has an anxiety subscale (items 3, 4, and 5);
- Asks about self-harm thoughts (item 10).

Women with a score higher than 12 (out of 30) have 10 times the likelihood of being diagnosed with postpartum depression than women with a lower score.

Whooley Questions for Depression Screening¹²¹

There are two Whooley questions for depression:

- During the past month, have you often been bothered by feeling down, depressed, or hopeless?
- During the past month, have you often been bothered by little interest or pleasure in doing things?

If a woman answers yes to either of these questions, it signifies need for further follow-up to determine whether she has depression.

Trauma- and stressor-related disorders, including PTSD, affect about 3% of postpartum women and up to 15% of high-risk women¹⁵⁸. Important risk factors included a history of psychopathology, current depression, and complications during pregnancy, labor and delivery. While it is rare that a stressful birth experience leads to PTSD, risk factors do include having a birth experience different from what was expected and ineffective communication where HCPs do not listen to the woman.¹⁵⁸



Severe Postpartum Mental Disorders

Bipolar Disorder and Schizophrenia

About 2% of pregnant women have a pre-existing bipolar disorder, and less than 1% have a pre-existing psychotic disorder such as schizophrenia.¹⁵⁹ Women with severe mental disorders are at particularly high risk of relapse in the postpartum period and usually require special mental health care. They are also at high risk of developing postpartum depression.¹⁴⁰

Evidence suggests that there is a relationship between bipolar disorder and postpartum psychosis, with the majority of cases thought to be variants of bipolar disorder. The risk of relapse in women with primary psychotic disorders increases during the postpartum period.^{160,161} Sometimes postpartum psychosis is preceded by hypomanic or manic symptoms.¹⁶²

Women with severe mental disorders and their families require support from professionals and family/friends as well as appropriate treatment to promote optimal health and parenting.

Postpartum Psychosis

Postpartum psychosis, the most severe postpartum psychiatric disorder, is a medical emergency. Postpartum psychosis occurs in approximately 1 in every 600 postpartum women.¹⁶¹ It most often occurs during the first week or the first month postpartum, but it can occur later in the postpartum period or at weaning, although the latter is rare.

The primary symptoms of postpartum psychosis reflect a significant change from the woman's usual personality, with confusion and clouding of consciousness considered classic symptoms. These symptoms may be accompanied by an inability to distinguish thoughts from reality and delusions about herself, her baby, or others.^{163,164}

Women with a history of bipolar and psychotic illnesses are at increased risk for postpartum psychosis, particularly if they stopped taking medication during pregnancy or in the early postpartum period. Other risk factors include a family history of psychiatric illness (particularly bipolar affective disorder) and sleep deprivation among women with a previous bipolar mood disorder diagnosis.¹⁴⁰

Women with postpartum psychosis require urgent psychiatric consultation, pharmacological treatment, ongoing support to facilitate the recovery process, and usually hospitalization.¹⁶⁵ They should not be left to care for their babies alone until the psychosis has resolved. Assess and support safety of the mother and her baby on an individual basis, as delusions may increase the risk of harm to either or both. Family members should be educated and engaged, and ongoing support provided by professionals, community organizations, and family/friends.^{166,167}

Women who develop postpartum psychosis are at increased risk for reoccurrence during subsequent pregnancies.^{168,169}

4.2 LATE POSTPARTUM HEMORRHAGE

Late postpartum hemorrhage, also called secondary postpartum hemorrhage, can occur 24 hours to 12 weeks after childbirth. The potential causes of late postpartum hemorrhage include retained fragments of the placenta or membranes, sub-involution of the placental site, uterine infection, and coagulation defects. Treatment involves controlling bleeding with medications such as oxytocin, as well as possible blood replacement or surgical intervention.

As most cases of late postpartum hemorrhage occur after women leave birthing facilities, focus the discharge information on expected changes, what amount of bleeding is normal and what amount of bleeding is not normal, causes for concern, and when to contact an HCP or emergency department. If a mother needs to be re-admitted to hospital for late postpartum hemorrhage, it is very important not to separate the mother and baby and to provide support for breastfeeding.

4.3 INFECTIONS

Endometritis

Endometritis is an infection of the reproductive tract. It can occur at any time from birth to 6 weeks postpartum. Endometritis occurs after 1% to 3% of vaginal births and up to 27% of caesarean births.¹⁷⁰ Endometritis is limited to the uterine cavity but can spread.

A woman with mild endometritis has discharge that is scant or profuse, bloody, and foul smelling. In more severe situations, she has fever, chills, lower abdominal pain or uterine tenderness, anorexia, lethargy, and rapid pulse. Treatment includes administration of antibiotics and can also include rest, a high fluid intake, analgesia as needed, and administration of oxytocics to keep the uterus contracted. Comfort measures are important to relieve the symptoms.^{170,171}

Women need to be informed about what to expect with regard to normal lochia and vaginal discharge, and should call their HCP if they develop symptoms of endometritis.



Mastitis

Mastitis is an inflammation of the breast that may involve an infection. It is characterized by localized tenderness, redness, and heat, and systemic symptoms of fever, malaise, and occasionally nausea and vomiting.¹⁷² Mastitis commonly occurs within the first 6 weeks postpartum, but can occur at any point during lactation. It can start as engorgement, develop into non-infective mastitis, and then become infective mastitis.¹⁷² While the breast is congested/engorged, the most effective treatment is breast emptying—by an electric pump if necessary—and increased water intake.

Mastitis occurs in 10% of breastfeeding women, but some studies have reported the incidence to be as high as 33%.¹⁷³

Encourage mothers to continue breastfeeding. It is important that mothers know their milk is safe for their baby even if they require antibiotics. Frequent feeding and good positioning and latching, with effective milk flow from breast to baby, are preventive factors for mastitis.

4.4 CARDIOVASCULAR AND HYPERTENSIVE DISORDERS OF PREGNANCY

Hypertension affects 6% to 10% of pregnant women, but few studies have reported the incidence of postpartum hypertension. Women who have had chronic hypertension, gestational hypertension, preeclampsia, and eclampsia may have preeclampsia postpartum—and may develop preeclampsia for the first time postpartum.¹⁷⁴ As such, if a mother has hypertensive disorder of pregnancy (HPD), postpartum monitoring is important.

Refer to the SOGC guideline *Diagnosis, Evaluation, and Management of the Hypertensive Disorders of Pregnancy* for information on care in the first 6 weeks postpartum and beyond. The Working Group recommends checking blood pressure 3 to 6 days following birth, especially if the woman has had a pregnancy complicated by high blood pressure.¹⁷⁵

During pregnancy, women may develop conditions such as preeclampsia and gestational diabetes mellitus (GDM) that put them at higher risk of heart disease and stroke. Pregnancy-related stroke can happen at any stage of pregnancy, but the greatest risk is during birth and the first few months postpartum. It is usually the result of a pre-existing blood vessel malformation or eclampsia. Peripartum cardiomyopathy (PPCM) is a rare—and often misdiagnosed—form of cardiomyopathy that occurs in the last month of pregnancy and up to 5 months postpartum.

There are a number of risk factors for peripartum cardiomyopathy: multiple pregnancies, twins, preeclampsia and eclampsia, a history of heart problems, excessive alcohol consumption, smoking, diabetes, obesity, unhealthy diet, and African heritage.¹⁷⁶

It is important to describe the signs and symptoms of heart disease and stroke to women and their families and explain when to talk to an HCP or seek emergency care.

4.5 EXTENSIVE PERINEAL TEARS

Approximately 53% to 79% of women experience some form of laceration during vaginal birth—most often in the perineal body and commonly first- and second-degree lacerations. The more severe third- and fourth-degree lacerations that result in obstetrical anal sphincter injuries (OASIS) may occur in up to 11% of women who have vaginal births.¹⁷⁷ OASIS may result in significant problems, including anal incontinence, rectovaginal fistula, and pain, along with increased risk of postpartum urinary retention.

Women who have lacerations during birth need to be made comfortable and helped to recover—and be supported in their confidence in caring for their baby. Provide information so that the woman understands what happened during the birth and the extent of the laceration/injury. Focus on what can help recuperation and healing; that is, rest,

hygiene, prevention of constipation, and pain management, as needed, so that they can be actively involved in caring for their babies. Helpful measures include sitz baths, using the side-lying breastfeeding position, avoiding sitting or standing for long periods of time, and seeking and accepting support from family and friends.

The SOGC recommends that HCPs carefully examine all women for perineal or vaginal tears and that anyone with a tear that is more than superficial has a systematic rectal exam for OASIS.¹⁷⁸ The SOGC guidelines provide recommendations on prophylactic antibiotic administration, the use of laxatives, as well as analgesics for pain, in the case of OASIS.¹⁷⁸

Refer women who have OASIS to a physiotherapist skilled in helping with this condition.^{178,179} The benefits relate to wound healing as well as rehabilitation to restore local and integrated muscle function following the muscle trauma. Scar management may be required to help the woman have intercourse without fear and pain. These considerations may also be relevant for first- and second-degree tears, although in this case referral to physiotherapy is not always necessary.

4.6 FEMALE GENITAL MUTILATION/CUTTING (FGM/C)

Women who have experienced female genital mutilation/cutting (FGM/C), also known as circumcision, need particularly sensitive postpartum care. Learning about the cultural, social, psychological, and physical implications of this centuries-old traditional practice will help HCPs talk to mothers appropriately and provide care that is culturally aware and respectful. The perineal area may be extremely painful due to repeated cutting and laceration throughout life compounded by a recent vaginal birth, making even walking difficult. This all makes caring for their baby more problematic.¹⁸⁰

Following birth, women need additional advice on perineal hygiene. Perineal infections may occur if culturally acceptable methods of cleanliness are not understood by HCPs. For example, using water may be considered impure on religious grounds. Instead, a diluted antiseptic wash may be used for cleaning after voiding.

HCPs will want to address birth control methods, as choice may be limited for women with FGM/C. They may have been taught that touching their genitals is forbidden, and because the vaginal area is sensitive, the use of diaphragms, cervical caps, and sponges is usually not suitable. The most acceptable and reliable method of birth control for women with FGM/C may be intrauterine contraception (IUC, also known as an intrauterine device or IUD). Hormonal contraceptives, either oral or implanted, are also possible. As for all women, the different contraceptive options should be explained carefully and clearly.

HCPs also need to discuss FGM/C with parents and inform them that performing FGM/C is illegal in Canada.

4.7 DIASTASIS OF THE RECTUS ABDOMINIS MUSCLE

Diastasis recti abdominis (DRA) is defined as a separation of the two sides of the rectus abdominis muscles.¹⁸¹ The onset of DRA occurs during pregnancy and the first weeks following birth.¹⁸² The literature on the prevalence and risk factors for development of this condition is limited.^{181,182}

A prospective cohort study of 300 first-time pregnant women found the prevalence of mild DRA to be high both during pregnancy and after childbirth: 33% at 21 weeks gestation; 60% at 6 weeks postpartum; 45% at 6 months postpartum; and 33% at 12 months postpartum. There was no difference in reported lumbopelvic pain in women with and without DRA.¹⁸¹ In another prospective study of 84 first-time pregnant women, the prevalence of DRA

decreased from 100% at gestational week 35 to 39% at 6 months postpartum. Women with DRA at 6 months postpartum were equally likely to report lumbopelvic pain as women without DRA.¹⁸²

A widening of greater than 2.7 cm at the level of the umbilicus is considered to be pathological diastasis of the rectus abdominis muscle.¹⁸³ It can have negative health consequences for women during pregnancy and the postpartum period and beyond, including altered body mechanics and posture, injury of the lumbar spine and pelvis, and impaired pelvic stability.^{184,185}

Exercise is a protective factor in the development of DRA.¹⁸⁶ Exercise may reduce the risk of developing DRA as it helps to maintain tone, strength, and control of the abdominal muscle. In addition, women who exercise during and after pregnancy most likely exercised before pregnancy and have better-conditioned abdominal muscles than women who do not exercise. The type of exercise also affects DRA width and recovery time.¹⁸⁶

It is important to refer women with DRA to pelvic floor physiotherapy.¹⁸⁷ Physiotherapy or exercises for diastasis recti should not only address the separation but retrain the pelvic floor muscles. More than 70% of women with rectus diastasis cannot do a pelvic floor contraction and therefore are more likely to experience incontinence, prolapse, and pelvic pain.¹⁸⁸ Consider as well physiotherapy or exercises that address posture, body mechanics, and restricted tissues that may be causing poor movement. A corset or binder is often recommended for separations of 4 finger widths or more. Neuromuscular electrical stimulation also helps to reduce DRA, and if combined with abdominal exercises, can augment the effects.¹⁸⁹ Some women may meet the criteria for surgery (abdominoplasty) if they have unresolved symptoms that have not responded to exercise.¹⁸⁷

4.8 GESTATIONAL DIABETES MELLITUS

It is important to encourage women who have had gestational diabetes mellitus (GDM) to breastfeed immediately after childbirth. Breastfeeding helps to lower the risk of neonatal hypoglycemia.¹⁹⁰

Women with GDM require information about the associated health risks:

- Between 16% and 30% of women with GDM develop type 2 diabetes by 5 to 10 years postpartum, and some women develop type 1 diabetes.¹⁹¹
- Metabolic syndrome is more common in women with GDM. Women should be counselled about lifestyle modifications to prevent diabetes and cardiovascular disease. Lifestyle changes can prevent the onset of type 2 diabetes.¹⁹¹
- The recurrence rate of GDM in subsequent pregnancies is about 30% to 84%.¹⁹²

For most women with GDM, diabetes goes away soon after childbirth. However, only 50% of women return for postpartum testing due to time pressures, lack of childcare, lack of awareness of the importance of postpartum screening, the unpleasantness of the test, and other factors.¹⁹¹⁻¹⁹³ The SOGC guideline *Diabetes in Pregnancy* recommends that women with GDM be screened with a 75 g oral glucose tolerance test (OGTT) between 6 weeks and 6 months postpartum to detect prediabetes and diabetes.¹⁹⁴ Women with GDM may benefit from the support of a lactation consultant or specialist in case of delayed onset of breastmilk secretion.^{195,196}

The Canadian Diabetes Association Clinical Practice Guideline Expert Committee recommends that after childbirth women with pregestational diabetes:¹⁹⁷

- Breastfeed for the many benefits it offers;
- Be carefully monitored as they have a high risk of hypoglycemia postpartum;

- Use metformin and glyburide, if needed, as they can be used during breastfeeding; and
- Have their triglycerides assessed late postpartum.

In addition, women with type 1 diabetes in pregnancy should be screened for postpartum thyroiditis with a thyroid-stimulating hormone (TSH) test at 6 to 8 weeks postpartum.

4.9 THYROID CONDITIONS

Postpartum thyroid dysfunction is common and includes hypothyroidism, hyperthyroidism, and postpartum thyroiditis. It is important to observe postpartum women who have thyroid dysfunction in pregnancy. Women who have thyroid disorders can usually breastfeed.¹¹⁷

There are no Canadian national guidelines on thyroid disorders in pregnancy or postpartum. The *Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease During Pregnancy and the Postpartum* offers advice on diagnosing and managing thyroid conditions during the postpartum period and breastfeeding.¹⁹⁸

4.10 SYMPHYSIS PUBIC DYSFUNCTION, PELVIC GIRDLE PAIN, AND DIASTASIS SYMPHYSIS PUBIS

Symphysis pubic dysfunction (SPD) has been described as a collection of signs and symptoms of discomfort and pain in the pelvic area, including pelvic pain radiating to the upper thighs and perineum.¹⁹⁹⁻²⁰¹ While this term has been used to describe pregnancy-associated pain and instability and dysfunction of the symphysis pubis joint (SPJ) or sacroiliac joint (SIJ), the European Guidelines recommend *pelvic girdle pain* (PGP) as the accepted umbrella term.²⁰¹ PGP symptoms occur due to pelvic ligament relaxation and increased joint mobility in pregnancy, and can vary from mild discomfort to severely debilitating pain.²⁰²

About 20% of pregnant women experience PGP.^{201,203} Risk factors for developing PGP during pregnancy include a history of previous low back pain and previous trauma to the pelvis.²⁰¹ Prolonged and difficult births, often with larger babies, with the women's legs widely abducted, and possibly assisted by forceps, can also be contributing factors. The reported incidence of clinically persistent PGP from the postpartum stage to 2 years after childbirth ranges from 5% to 8.5%.²⁰⁴

In severe cases, the symphysis pubis may partially or completely rupture. Diastasis of the symphysis pubis (DSP), where the gap in the symphysis pubis increases to more than 10 mm, can only be confirmed by diagnostic imaging.^{205,206} DSP can occur during pregnancy, childbirth, or the postpartum period.²⁰⁶ Although specific recurrences are difficult to predict, women need to be made aware of the high recurrence rate (68–85%) in subsequent pregnancies.²⁰⁷ A small subgroup of patients with PGP can develop chronic pain leading to high disability with resistance to physical interventions. These women should receive multidisciplinary care involving medical and psychological intervention.

There are no Canadian guidelines on diagnosing and managing PGP. Guidelines from Ireland and the United Kingdom are consistent in their message that symptoms of pelvic girdle pain are often mild but can be seriously disabling.^{206,208} Women should be asked at every postpartum contact whether they are experiencing pelvic girdle or lower back pain.^{206,209} Indications of pain and difficulty with walking after giving birth may indicate pubic symphysis diastasis and should not be discounted as a “minor discomfort of childbearing,” but investigated. Do not discount any level of pain—rather, undertake a careful clinical assessment to determine the extent of the pain and any symphysis pubis dysfunction. Assessments should include determining what occurred during pregnancy and childbirth, and running diagnostics and making timely referrals, including to physiotherapy, to avoid long-term and potentially permanent disability.^{201,209}

4.11 ASSISTED VAGINAL BIRTH

In 2016/2017, 13% of women who gave birth in Canada had an assisted vaginal birth, 9% had a vacuum birth, and 4% had a forceps-assisted birth.²¹⁰ Recent evidence reviews have shown that women who had an assisted vaginal birth were more likely than those who had a spontaneous birth to have at least one health problem during the early postpartum period, for example, painful perineum, constipation, hemorrhoids, breakdown of stitches, and urinary or fecal incontinence. They were also more likely to have a painful perineum at 8 weeks postpartum, regardless of whether they had an episiotomy.^{59,177}

Forceps-assisted and vacuum-assisted births are associated with an increased risk of injury to the vagina, perineum, and anus. Tears are more severe, which may require prolonged healing.²¹¹ Women who have a forceps-assisted birth have a significantly greater decrease in intra-anal pressure and a greater incidence of a weak pelvic floor.²¹²

It is important to focus on the woman's comfort during the postpartum period, determining if she has any concerns about perineal comfort or healing, as well as pain, discomfort or stinging, odour, incontinence, or dyspareunia.²⁴ The integrity and progress in healing of the perineum needs to be assessed, with pain relief or comfort measures offered and their effectiveness assessed. Women need information on the use of ice packs to decrease swelling, care of the perineum, self-inspection, warm water sitz baths, and Kegel exercises to improve perineal tone.⁴¹



4.12 URINARY OR FECAL INCONTINENCE AND URINARY RETENTION

A significant number of women experience urinary and fecal incontinence following childbirth. The condition is both physically and psychologically challenging, and can influence many aspects of women's lives and recovery.

Urinary Incontinence

During pregnancy and childbirth, the pelvic floor muscles are stretched and weakened, placing women at risk for the development of urinary incontinence.²¹³ While urinary incontinence can happen during pregnancy, stress urinary incontinence results from pelvic floor trauma during vaginal birth, especially the first birth. Although antenatal urinary incontinence, obesity, and significant perineal trauma are risk factors, clinical studies have not identified any single responsible event, suggesting that the problem is multifactorial.²¹²⁻²¹⁴

Some women have temporary urinary incontinence, but others have long-term problems.²¹³ According to the Maternity Experiences Survey, 3.4% of all women who gave birth reported urinary incontinence as “a great deal of a problem” in the first 3 months postpartum.²¹⁵ Women who had vaginal births were more likely to report this problem (4.2%) than women who had caesarean births (1.1%). First-time mothers were also more likely to report this problem (4.0%) than multiparous women (2.9%).²¹⁵



Research indicates that women who had a forceps-assisted birth (with or without an episiotomy) were 10 times more likely to have significant perineal trauma than women who delivered by vacuum extraction without an episiotomy. Moreover, 5 years later, almost half of the women who had assisted vaginal births had some degree of urinary incontinence.⁵⁹

When talking with women about urinary incontinence, focus on prevention, muscle toning techniques, and other interventions. Pelvic floor muscle training can prevent urinary incontinence for up to 6 months after first-time mothers have given birth.²¹⁶ There is also evidence that pelvic floor muscle training is appropriate for women with persistent postpartum urinary incontinence.²¹⁶ The effectiveness might be increased with targeted approaches.

The SOGC recommends Kegel exercises for incontinence with follow-up to assess their effectiveness. Combining any necessary lifestyle changes with bladder training plus pelvic muscle exercises is highly effective. Refer to the SOGC guidelines *Conservative Management of Urinary Incontinence*.²¹⁷

Urinary Retention

Urinary retention is a sudden inability to spontaneously void the bladder or where a woman passes small amounts of urine but is unable to fully empty her bladder.²¹⁸⁻²²⁰ Symptoms of urinary retention include urinary frequency, voiding small amounts, bladder discomfort or pain, straining to void, reduced sensation to void, incomplete emptying of the bladder and urinary incontinence.²²¹

Postpartum voiding dysfunction is defined as failure to pass urine spontaneously within 6 hours of vaginal delivery or the removal of a catheter.²¹⁸ If urinary retention is not detected and managed, it can lead to bladder distention or underactivity and longer-term problems such as incontinence and urinary tract infections.^{222,223}

The causes of urinary retention are not well understood, but likely mechanical, physiological, and neurological factors are involved.²²⁰



There are no national Canadian guidelines on postpartum urinary retention, but NICE guidelines recommend that if a woman has not passed urine within 6 hours of childbirth, she has warm baths or showers to assist urination. If these actions are not successful, bladder volume should be assessed and catheterization considered.²⁴

Fecal Incontinence

According to the Maternity Experiences Survey, 1.8% of all women who gave birth reported that loss of bowel control was most pronounced in the first 3 months postpartum.²¹⁵ First-time mothers were more likely to report this problem (2.2%) than multiparous women (1.4%).²¹⁵ Anal incontinence after childbirth is more prevalent among women who have had a forceps-assisted birth and laceration of the anal sphincter.^{224,225} In addition, women who have anal sphincter tears are more than twice as likely to report postpartum fecal incontinence than women without sphincter tears.^{224,225}

For women who had an OASIS repair, the SOGC recommends prescribing laxatives and non-steroidal anti-inflammatories and acetaminophen as first-line agents, and a single dose of an intravenous antibiotic. HCPs will want to discuss the degree of injury and arrange for appropriate follow-up. The SOGC also recommends that women with anal incontinence be referred for pelvic floor physiotherapy.¹⁷⁸

4.13 PROLONGED STAY IN HOSPITAL

Having to remain in hospital for a prolonged period after childbirth can be extremely stressful for families. Mothers may be distanced from their support circle of friends and family. Concerns regarding contact with and care of other children may be a source of stress. Families may be worrying about the mother's health and the care of siblings; contact with other children and grandparents; travelling logistics to and from the hospital; and work obligations of partners. It is important that HCPs explore these issues with the family and support them as much as possible. Consider referrals to social services if needed and innovative technology-based programs and resources to help keep families connected. When women are sole-parenting, prolonged stay situations can escalate their stress and anxiety and interfere with their recovery.

A prolonged hospital stay requires compassionate and individualized care. Policies should focus on enabling skin-to-skin contact, supporting breastfeeding, and allowing mothers and babies to be together (rooming-in/mother-baby care).²³

Mothers who are breastfeeding should have the opportunity to feed frequently and on cue for as long as they want and receive help with breastmilk expression, if needed.²²⁶ If the baby cannot be given their mother's breastmilk, pasteurized human donor milk is the next best choice.^{20,93,227} It is incumbent upon HCPs to consult expert resources to determine the effects on the breastfeeding mother and breastfed baby of any medications the mothers is taking. Only a small number of medications are contraindicated while breastfeeding.²²⁸

“ Policies should focus on enabling skin-to-skin contact, supporting breastfeeding, and allowing mothers and babies to be together (rooming-in/mother-baby care). ”



5 COMPLICATIONS RELATED TO THE NEWBORN

According to findings from the ACoRN program, complications related to the newborn fall into eight areas of concern:

- Infection
- Cardiovascular
- Respiratory
- Neurological
- Gastrointestinal or surgical
- Glucose and electrolytes
- Jaundice
- Thermoregulation

Refer to the CPS ACoRN program for guidance on neonatal stabilization, support for multidisciplinary teams, and identifying and caring for babies who are unwell or at risk of becoming unwell in the first few hours or days after childbirth.¹¹⁹

5.1 INFECTION

If the baby has an infection, supportive care with adequate time to share information is essential. The mother and baby should be considered a unit—with non-separation the goal at all times.

Refer to the CPS guidelines for the diagnosis and treatment of infectious disease in newborns.

Sepsis

With the introduction of guidelines for systematic maternal screening and increased use of intrapartum antibiotics, the incidence of group B streptococcal (GBS) sepsis has decreased from 1.7 cases per 1000 live births in 1993 to 0.22 cases per 1000 live births in 2016.^{229,230} Despite this, GBS remains the leading cause of neonatal infection in Canada. In 2012, 48% of the cases of early onset neonatal sepsis were due to GBS, while *Escherichia coli* accounted for 31%.²³¹

Evaluating the risk of sepsis is an important part of the newborn assessment. Prompt treatment prevents the progression to severe disease. Babies at risk for sepsis are those where the mother has maternal GBS colonization in the current pregnancy or GBS bacteriuria; a previous baby with invasive GBS disease; prolonged rupture of membranes (≥ 18 hours); and maternal fever (temperature ≥ 38 °C).

The CPS guideline *Management of Term Infants at Increased Risk of Early Onset Bacterial Sepsis* recommends that any newborn with clinical signs suggestive of sepsis immediately undergo diagnostic evaluation and receive antibiotic therapy. The initial signs of sepsis may be subtle; they include respiratory distress, temperature instability, tachycardia, seizures, hypotonia, lethargy, poor peripheral perfusion, hypotension, and acidosis. Refer to this CPS guideline for diagnosis and management of sepsis.

The care of apparently healthy babies who have risk factors should be individualized. The care will depend on the number of risk factors and whether maternal intrapartum antibiotic prophylaxis for GBS was used. The CPS guideline *Management of Term Infants at Increased Risk of Early Onset Bacterial Sepsis* has recommendations for various clinical situations and the care of infants who appear healthy but nevertheless have risk factors.

5.2 CARDIORESPIRATORY DISTRESS AND CARDIAC CONCERNS

Cardiorespiratory distress in the newborn may occur immediately after childbirth or later in the postpartum period. All HCPs caring for newborns must be able to assess respiratory distress, cyanosis, and perfusion. The CPS recommends that all centres in which babies are born have personnel capable of initiating assisted ventilation.²³² They also recommend following Neonatal Resuscitation Program guidelines for specific resuscitation procedures immediately after the birth and having a written policy regarding the initial care of a baby with respiratory distress outside of each birthing room in each facility.²³² Regular simulation sessions or other forms of practice scenarios are useful opportunities for continuing education and maintenance of skills.

Heart murmurs are common in the first few days of life and do not normally indicate a significant problem. In the first 24 hours, murmurs are often indicative of flow through the patent ductus arteriosus and disappear following the closure of the ductus. However, any murmur, even within the first 24 hours, must be assessed in the context of the entire physical examination. If a murmur persists or is symptomatic, a more complete evaluation is recommended.^{233,234}

The incidence of CCHD in Canada is 3/1,000 live births and accounts for more deaths than any other congenital malformation. Between 10% and 30% of CCHD diagnoses are not made prior to discharge from hospital. Early diagnosis and follow-up are essential first steps in preventing infant mortality and morbidity.⁹⁸ Pulse oximetry screening, used in conjunction with prenatal ultrasound and physical examination, is the best approach to detecting CCHD in newborns.⁹⁹

5.3 HYPOGLYCEMIA

The definition of hypoglycemia in the newborn is controversial. Multiple reviews have concluded that no specific glucose concentration can be linked to clinical signs or neurological injury.²³⁵ Approximately 12% to 14% of healthy, appropriate-for-gestational-age (AGA), breastfed, term newborns have blood glucose levels of less than 2.6 mmol/L in the first 72 hours of life.²³⁶

The CPS does not recommend routine blood glucose monitoring in healthy term babies.^{237,238} However, it is important to routinely screen babies at risk for hypoglycemia, including babies of mothers with diabetes (gestational and preconception), preterm babies, and both small-for-gestational-age (SGA) (weight < 10th percentile) and large-for-gestational-age (LGA) babies (weight > 90th percentile). The general recommendation for this population is that glucose levels be maintained at 2.6 mmol/L or higher after the first 2 hours of age.

Blood glucose screening of asymptomatic at-risk babies should begin at 2 hours of age and continue at a frequency and duration that depends upon the specific risk factors and until pre-feeding glucose levels have been consistently documented.^{235,238} Babies who are unwell or show signs of hypoglycemia, such as jitteriness, lethargy, poor feeding, apnea, or tachypnea, require immediate testing.

Approaches to the management of hypoglycemia depend upon whether it is asymptomatic or symptomatic. Early and frequent skin-to-skin contact and breastfeeding is encouraged in asymptomatic babies, with supplementation with expressed breast milk the next best approach. A breast milk substitute may be considered, if essential.²³⁸

Refer to the CPS guideline *Screening and Management of Newborns At Risk for Low Blood Glucose* for information on diagnosis, monitoring, and management of hypoglycemia.²³⁸

5.4 PRENATAL ANTIDEPRESSANT USE

Selective serotonin reuptake inhibitors (SSRIs) are the antidepressant medications most frequently prescribed for the general population and pregnant women.²³⁹ When considering prescribing or discontinuing SSRIs, HCPs are expected to weigh the potential harms of untreated depression or anxiety against potential risks to the fetus or newborn. SSRIs as a group have not been found to increase risk of major congenital malformations when used in the first trimester. However, paroxetine use in the first trimester may increase the risk of cardiovascular malformation, and other SSRIs may increase the risk of specific birth defects.²⁴⁰

Third trimester use of SSRIs has been linked to a constellation of neonatal signs including prolonged crying, jitteriness, increased tone, tachypnea, cyanosis and feeding difficulty.²⁴¹ These signs occur in 10% to 30% of babies exposed to SSRIs in utero, usually within several hours of birth. The signs are usually mild—sometimes so mild they are difficult to identify—and resolve over several weeks.^{242,243} The mother is the best person to settle her baby with skin-to-skin contact, breastfeeding, and holding and comforting—the HCP's role is to support her in caring for her baby and to provide a calm, quiet environment.

The CPS recommends observing the baby in hospital for 48 hours when SSRIs have been used during the third trimester.²⁴⁰ However, since the majority of babies exposed to SSRIs are born healthy, Perinatal Services BC recommends considering discharge after 24 hours for babies who show no adverse signs or symptoms and who meet the following criteria:

- normal vital signs and oxygen saturation levels for the first 24 hours and at discharge;
- a normal physical exam;
- established feeding;
- well-regulating temperature; and
- no signs or symptoms of neonatal abstinence syndrome (NAS).²⁴⁴

It is important to inform families about the possible effects of SSRIs on their baby and about strategies to support babies with symptoms. Postpartum use of SSRIs is not a contraindication to breastfeeding.²⁴⁰ While information about long-term neurodevelopmental outcomes after prenatal SSRI exposure is largely reassuring, evidence in this area is limited.

Refer to the CPS guideline *Selective Serotonin Reuptake Inhibitors in pregnancy and infant outcomes* on caring for babies with SSRI exposure.²⁴⁰

5.5 SMALL-FOR-GESTATIONAL-AGE BABIES AND MACROSOMIA

Small for Gestational Age

Babies who are born small for gestational age (SGA) have a birth weight below the 10th percentile of the age- and gestation-specific birth weight. The rate of SGA births has increased steadily between 2008 and 2014, from 8.2 to 9.1 per 100 singleton live births in Canada.²⁴⁵ Intrauterine growth restriction (IUGR) describes genetic or environmental factors preventing a fetus reaching its growth potential. Low birth-weight is defined as weight at birth of less than 2500 grams (5.5 pounds) irrespective of gestational age.²⁴⁶

Babies with SGA have physical characteristics (behaviour, alertness, spontaneous activity, and feeding ability) similar to those of normal-sized babies of like gestational age. They may look small and thin because they have decreased subcutaneous fat tissue and muscle mass, but they do not have the complications related to organ system immaturity that preterm babies of similar size have. Any complications are usually a function of the underlying cause of the SGA.²⁴⁷

Parents and families of babies who are born SGA are anxious about their baby's well-being and require supportive care, counselling, and reassurance. Caring for the mother-baby unit, non-separation, and supporting breastfeeding are all essential aspects of care.

Macrosomia

There is no consensus on the definition of fetal macrosomia, which some define as birth weight of more than 4000, 4500, or 5000 g, regardless of the baby's gestational age. Others define macrosomia as a baby above the 90th birth-weight percentile for gestational age of a reference population—also known as large-for-gestational-age (LGA) babies.²⁴⁸ The description *normal birth weight* depends on the population of reference.

In Canada, the LGA birth rate among singleton babies decreased from 11.6 to 10.2 per 100 singleton live births between 2005 and 2014.²⁴⁵ Babies born with macrosomia are at higher risk of perinatal mortality (stillbirth and early neonatal, late neonatal, and post-neonatal mortality) and have a higher risk of shoulder dystocia, asphyxia, congenital anomalies, infection, and SIDS.²⁴⁸

In addition, these babies are more likely to be born with a lower than normal blood sugar level, have a higher risk of childhood obesity, and a higher risk of metabolic syndrome during childhood.²⁴⁹ Babies with macrosomia should be assessed for low blood sugar and jaundice and be encouraged to feed soon after the birth to prevent low blood sugar.²⁵⁰

5.6 NEONATAL OPIOID WITHDRAWAL SYMPTOMS

Neonatal opioid withdrawal symptoms are a group of possible symptoms experienced by babies whose mothers used opioids during pregnancy. From 48% to 94% of babies exposed to opioids in utero have opioid withdrawal symptoms.²⁵¹

While their symptoms vary, babies who have been exposed to opioids in utero may feed poorly and have diarrhea and weight loss. They may demonstrate tremors, tight muscle tone, excessive crying, hyperactive Moro reflex (sometimes called the startle reflex), irritability, vomiting and convulsions, hyperthermia and tachypnea.^{252,253} If these signs become sufficiently severe, and depending on the drug that the baby was exposed to, the baby may require pharmacotherapy.

The CPS recommends that all babies exposed to opioids be assessed using a scoring system that measures the severity of withdrawal symptoms and helps determine the need for additional monitoring, nursing, medical intervention, or pharmacological therapy.

Refer to the CPS practice point *Managing Infants Born to Mothers Who Have Used Opioids During Pregnancy* for details.²⁵³

The CPS also notes that the length of stay in hospital varies depending on exposure to opioids prenatally, severity of withdrawal, symptoms, treatment, and social factors. The Society recommends observing babies for a minimum of 72 to 120 hours, depending on their exposure to opioids. If the treatment threshold is not reached within that time, the baby can be discharged. The key to a successful transition home is to ensure continuity of care by an interprofessional team, with anticipatory planning for when the baby meets criteria for discharge.²⁵³

It is important that babies be cared for in their mothers' rooms. Having in place a protocol for rooming-in and use of morphine (if required) for opioid-exposed babies helps to reassure staff about the safety of this treatment modality and supports them in caring jointly for the mothers and their babies. The BC Perinatal Services and British Columbia Centre on Substance Use guideline *Treatment of Opioid Use Disorder During Pregnancy Guideline Supplement* offers a sample rooming-in protocol for opioid-exposed neonates.²⁵²

Encourage mothers to hold and cuddle their baby as much as possible, as this helps to settle the baby and minimize withdrawal. In addition, if the mother is relaxed, the baby is more likely to relax. Also encourage breastfeeding, as this can delay the onset and decrease the severity of withdrawal symptoms as well as decrease the need for pharmacological treatment.^{253,254} Consider that even babies who do not have in utero exposure to opioids usually take at least 36 to 72 hours to settle until the mother's breast milk comes in and breastfeeding is established.

If the baby requires pharmacotherapy, the mother and baby may be subject to a prolonged hospital stay. It is important to inform the mother during her pregnancy that she and her baby may need to stay longer at the hospital so that she has a realistic understanding of the early postnatal period and be better prepared for any additional care her baby may require. Note that rooming-in and non-pharmacological care often reduce withdrawal signs to the extent that pharmacotherapy treatment is not required.^{252,253}

Mothers who used opioids during pregnancy may experience a range of emotions; for example, anxiety over the well-being of their baby, concerns about withdrawal signs the baby is showing, and worries about maintaining custody, or they may be confident and relaxed. It is essential to individualize care to support the mother and other caregivers.

The CPS practice point *Managing Infants Born to Mothers Who Have Used Opioids During Pregnancy* discusses discharge criteria relating to the newborn and referral to support services and family services be considered.²⁵³ In the *Treatment of Opioid Use Disorder During Pregnancy Guideline Supplement*, the BC Perinatal Services and British Columbia Centre on Substance Use advise that maternal opioid use alone is not grounds for the apprehension of a baby by authorities or referral to child protection. Make the decision to report on a case-by-case basis, in consultation with the entire health care team, although HCPs should be aware of their legal obligations in this regard.²⁵²

5.7 LATE PRETERM BABIES

Late preterm babies (34⁺⁰ to 36⁺⁶ weeks of gestation) vary widely in physiological maturity. The late preterm baby may have inadequate thermoregulation, immature and weak suck and swallow patterns, incomplete adaptation of certain enzyme systems, and poor immunological and respiratory defence systems.²⁵⁵ These factors contribute to increased risk of death and morbidity compared to full-term babies. Common problems are hypoglycemia, hypothermia, respiratory distress, infections, increased risk and delayed onset of hyperbilirubinemia, feeding issues, increased hospital readmission rates, and growth failure.²⁵⁶ Early term babies (37⁺⁰ to 38⁺⁶ weeks of gestation) are at increased risk for the same problems as late preterm babies, with increased likelihood of admission to NICU.²⁵⁷

An assessment at birth to confirm the baby's gestational age and ongoing monitoring are important to determine the treatment plan. Delay in adaptation might require admission to NICU, while mature late preterm babies can be cared for in regular postpartum care. In both situations, it is important to avoid separating the mother and baby.²⁵⁵

Screen for hypoglycemia and hyperbilirubinemia according to the *CPS Screening Guidelines for Newborns at Risk for Low Blood Glucose* and *Guidelines for Detection, Management and Prevention of Hyperbilirubinemia in Term and Late Preterm Newborn Infants*. Continued breastfeeding support is necessary to establish feeding and prevent readmission.

The CPS guideline *Safe Discharge of the Late Preterm Infant* provides detailed criteria for hospital discharge and post-discharge follow-up.²⁵⁵ Some key criteria include stable vital signs for at least 12 hours prior to discharge, 24 hours of successful feeding, and avoidance of mother-baby separation before discharge by providing flexible accommodation arrangements for parents. Arrange for a follow-up appointment within 24 to 48 hours of discharge with a community-based HCP, prior to the baby being discharged home.

5.8 ASSISTED VAGINAL BIRTH

Instrumental birth involves use of a vacuum extractor or obstetrical forceps. Trauma is the major complication of instrument-assisted birth in the newborn. Trauma may be caused by head compression and traction on the fetal intracranial structures, face, and scalp or by suboptimal instrument placement.²⁵⁸ The most serious sequelae of trauma is intracranial hemorrhage, which occurs in 16 to 17 per 10 000 births.^{259,260}

The overall risk to the newborn from assisted vaginal birth is low. The risks that could occur include bumps, bruises, or marks on the baby's head or face that heal in a few days or weeks; cone-shaping of the head, which returns to normal within a day or two; injuries to the baby's scalp, head, and eye; injuries to the nerves in the arm or face—the baby's face muscles may droop if the nerves are injured but go back to normal when the nerves heal.^{177,211} Subgaleal hemorrhage is a very rare but serious outcome.^{177,211} If the baby has any trauma from an assisted birth, it is important that the mother and family understand the cause, the care required, and the anticipated outcome.

Refer to the SOGC *Advances in Labour and Risk Management (ALARM)* course for assessment, monitoring, and care of the newborn with subgaleal hemorrhage.

5.9 ANOMALIES OR RARE CONDITIONS

Along with the joy of birth and the delight of welcoming a baby into the family, parents whose babies are born with congenital anomalies or rare conditions have special needs and may feel a sense of loss. Many factors influence parents' experience of having a baby with an anomaly: their personal beliefs, culture, and support network; their HCPs' knowledge and attitude; how the diagnosis is communicated; the information that they are given about their baby's diagnosis and what they can expect; and their connection to appropriate services and support groups.²⁶¹

In these situations, base all communication on compassion, using clear and simple terms.²⁶² Parents require access to the most current information about their baby's condition in a form they can understand.²⁶³ They need to understand the immediate care plan and know what to expect in the future.²⁶¹ They should also be told about the necessary resources available — medical services, clinics, specialists, therapy (e.g., physical, occupational, speech, vision), breastfeeding support, dietitians, mental health services, recreation services, and support groups.

When babies are born with anomalies or rare conditions, a team approach to the family's care is always required. Parents will often be referred to genetics services to help in the diagnosis of their baby. They could also be referred to genetics counselling if they have concerns about future pregnancies.

“ Parents require access to the most current information about their baby's condition in a form they can understand.

HCPs are encouraged to take extra time to communicate with the parents and family—including significant family members such as grandparents and siblings. Show compassion, listen carefully as the parents and family express their concerns and feelings, and communicate in a way that everyone can understand. It is also important to ensure privacy when discussing the baby with the parents or family.

It is critical to remind parents and family (often repeatedly) about what to expect when they are caring for their baby. When parents are first told about their baby's diagnosis, they are often overwhelmed to the point that they are unable to retain information. A designated HCP should follow up with parents through the postpartum period and to repeat information in subsequent meetings, to assess their ability to cope, and to refer them to appropriate services.²⁶¹

Referrals to peer support can be helpful to provide parents with a shared social identity and contribute to feelings of hope.²⁶⁴ Peer support can include face-to-face or online support groups relevant to the baby's specific condition.

5.10 PROLONGED STAY IN HOSPITAL OR NEONATAL INTENSIVE CARE UNIT

A baby remaining in hospital (especially in the NICU) for an extended period can create a great deal of stress for parents and families. The kind of care that the baby receives, and the approach to care, affects not only the baby's physical well-being but also parent-baby attachment, feeding, neurodevelopmental outcomes, and the overall health and well-being of the baby, parents, and family. The parents and family may be experiencing extreme emotions such as anxiety or depression, or conflicting feelings such as the joy at the birth of their baby and the fears for the baby's well-being and their ability to provide care.

NICU environments that facilitate shared decision-making and partnerships between parents and professionals and enable parents to be their baby's primary caregiver, create a more consistent care for the baby. They also protect the baby from trauma associated with the NICU, such as isolation, stress, and lack of support during painful procedures, and provide parents with the opportunity to develop confidence and skill in caring for their babies.^{30,265,266}

Critical elements of family-centred care include: unrestricted presence of the parents, 24/7; parents and family as primary caregivers for their babies with the support and guidance of HCPs; and open, continuous communication²⁶⁷. The basic principles of family-centred care in this context are the same as all family-centred care—dignity and respect, shared decision-making, choice, information exchange, empowerment, and collaboration.^{267,268}

Improvements in the baby's weight gain, decreased parental stress and anxiety, and increased high frequency exclusive breastfeeding at discharge are some of the demonstrated benefits of family-centred care in the NICU.^{269,270} Others include decreased length of stay, enhanced attachment between parents and babies, and greater family satisfaction.^{267,270} Family involvement is critical to enabling all babies to reach their full physical, cognitive, and psychosocial development—including those babies in the NICU.^{270,271}

The Family-Integrated Care (FICare) model is an extension of the principles of family-centred care, with parents as true partners in their baby's care within the NICU. This model was developed by a health care team that included parents whose babies had been in the NICU and follows research in Estonia.²⁹ Integrating parents into the care team in FICare goes well beyond merely allowing parents to be present and observing their baby's care.²⁷² Rather, parents provide most of the care for their baby while HCPs guide and counsel parents.^{29,30}

Single-family NICU rooms are now in use in a few centres in Canada as well as in the USA and Europe. The single-room setting has a number of benefits: it provides optimal environmental support to parents; reduces neonatal sepsis; improves baby weight gain; improves breastfeeding rates; improves control of excessive noise and light; improves staff and parental satisfaction with care; reduces parental and staff stress and anxiety; and costs the same, or possibly less, than standard NICUs.^{269,273-277} Single-room care has not been associated with any increase in adverse outcomes.²⁷⁵

The stressful environment of the NICU may add to the risks facing preterm or sick babies due to their physiological vulnerabilities, negatively impacting their growth, with the brain particularly affected. Developmental care refers

to a range of strategies designed to reduce the stresses of the NICU and include control of external stimuli, improved clustering of care activities, and positioning or swaddling of the preterm baby.^{278,279} While more research is needed, developmental care interventions has demonstrated benefits to the outcomes of preterm babies.²⁷⁹

Some families, including Indigenous families and those living in rural and remote areas, may be far from home and have to travel for the birth or if the mother and child are transferred to another facility after the baby is born. Prolonged hospital stays can be particularly stressful for these parents, as they are away from extended family members, friends, and support networks. They may have other children back home, which can cause additional stress.



Parents

- Are full partners in decision-making and caregiving and are integrated into the NICU team;
 - Have unlimited access to their babies and rooming-in, 24/7;
 - Are supported by HCPs in aspects of care, such as prolonged skin-to-skin contact, breastfeeding, and providing developmentally appropriate care so that they become competent in their caregiving;
 - Are supported in their baby's care to minimize their baby's stress and pain, to safeguard their sleep, and protect their baby's skin;
 - Participate in care planning—in rounds and having access to their baby's records;
 - Receive psychosocial support from the interprofessional team, including psychologists, and peers; and
 - Are enabled to express their emotions and fears.
-

Health care providers:^{29,267,269–271,280–283}

- Provide care based on interprofessional collaboration and partnerships with family and other professional providers;
 - Include parents as full partners in decision-making and care;
 - Shift their role from skilled provider to one of guidance, supporting parents in their role as primary caregivers, 24/7;
 - Focus on promoting baby–parent interactions, stressing the critical importance of parents' presence and rooming-in, and assuring them of unlimited 24-hour information and access to their baby;
 - Support parents in a compassionate, respectful way, recognizing their individual needs;
 - Support parents in skin-to-skin contact with their babies;
 - Support mothers in breastfeeding and feeding their babies breast milk;
 - Communicate with families openly and honestly, and spend time listening to the families' experiences, fears, and concerns;
 - Communicate warmly, regularly, in an understandable fashion, and in a culturally appropriate and safe manner;
 - Share information between themselves and with parents;
 - Are aware of the possibility of posttraumatic stress disorder (PTSD), and screen for depression; and
 - Are supported by system leadership who are committed to an integrated team approach to the needs of babies, families, and staff.
-

PROVIDING FAMILY-CENTRED CARE IN THE NICU^{29,268–271,280,281}

Policies:^{29,267,269–271,280,284}

- Are supported by a clear vision;
 - Have full leadership and administrative support;
 - Stipulate unlimited access and preferably rooming-in 24/7 and information for parents;
 - Stipulate that parents are integral members of the care team, not visitors, and are their babies' primary caregivers, sharing in decision-making;
 - Create opportunities for the participation of parents in support systems;
 - Stipulate that HCPs communicate regularly with parents and provide mechanisms to do so;
 - Ensure adequate staffing for the model of care in the unit;
 - Support ongoing professional development for NICU staff;
 - Actively involve parent partners and advocates in the development and monitoring of policies to inform quality improvement, and develop systems to accommodate this; and
 - Support early and frequent breastfeeding or breast milk expression, meetings with lactation consultants and adequate follow-up—with a written policy.
-

Infrastructure and supports^{267,271,283,285,286}

- The physical setting is supportive of the baby's well-being and neurodevelopment, i.e., in a single room with enough space and resources to support parents' presence (e.g., with showers, kitchen, laundry, lounge, etc.) so that the parents can stay in the room with their baby 24/7 (or sleeping rooms available).
 - The interprofessional team give the parents psychological and social support, and they have access to peer support.
 - The physical environment supports the breastfeeding mother, e.g., provides for intimacy and means of expressing breastmilk, etc.
 - Educational materials are available in plain language in a variety of formats (e.g., in writing, video, apps, etc.).
 - Mechanisms in place enable parents' involvement in their baby's care and inform them of their baby's well-being, even when they are not present (e.g., by using web cameras).
 - Preparation for the transition home begins at the baby's admission to the NICU, by providing information on the criteria for discharge and baby care, supporting parents to care for their baby, assessing the parents' social supports, and providing referrals to appropriate services.
 - Care planning for the transition to home includes coordination of health and social care plans with any applicable community services, which may require multi-agency collaboration.
-



6 LATE POSTPARTUM

New parents have many different emotions after the birth of their baby. They may feel full of joy and wonder, anxious, overwhelmed, worried and tired. Having a baby brings a myriad of changes—and is very demanding. It takes months or even years to adapt to these changes. Becoming a parent is a deeply significant personal and social transition that involves a change of identity.

When caring for the new mother and her family, the goal of HCPs is to assist her in this transition and recognize and support her role in caring for her baby and nurturing their interdependent relationship. It is critical to spend time listening to mothers and families and to provide support based on their individual needs and experiences.

Providers should let new mothers know that they have faith in them and their ability to care for themselves and their baby. Providers can also help them listen to their intuitions and learn from their experiences so they become more and more confident in their new role. With time, the mother can discover her strengths and her own way of doing things.²⁸⁷

Relationships with a partner and family are also undergoing transition. Communication is the key to nurturing these relationships. Talking about feelings, worries, and happiness during this intense period can help keep couples and/or families close.²⁸⁷

Healthy early childhood development includes the physical, social/emotional, and language/cognitive domains.²⁸⁸ Many health, social, and justice issues later in life have their roots in early childhood. Parents need the supports of HCPs and community programs to assist them in fostering the optimal growth and development of their baby starting from birth.

6.1 SYSTEMS TO FOLLOW FAMILIES POSTPARTUM

Postpartum support in the community should be planned according to a family-centred approach to care, based on women's experiences and needs, while respecting their diversity in the social and cultural contexts of their postnatal experience.²⁸⁹ The woman and her partner and newborn belong at the centre of care, with strategies planned and provided to meet their needs, respecting the woman's preferences and decisions, while ensuring she is treated with kindness, respect, and dignity.^{29,289,290}

Women, newborns, and families have different points of access to postpartum care in the community. These often involve numerous HCPs (e.g., physicians, nurses, and midwives; lactation consultants and registered dietitians; social workers and psychologists) and community-based providers (e.g., postpartum doulas and maternal child health home visitors). They also seek and receive support from their family members and peers.

Successful postpartum support strategies in the community are holistic and comprehensive, applying an efficient and effective interdisciplinary approach to care.²⁸⁹ Women should have multiple choices for the kind of supports that meet their needs. It is critical that women be provided with a first/consistent point of contact (for example, a public health nurse, midwife, or nurse practitioner) for when they need to reach out for support.

Hospitals, health centres, community-based organizations, and public health and primary care providers offer postpartum services in Canada. Some jurisdictions have centres that provide education, support, and programming for new mothers and young families. Various models are used, including phone calls, telephone triage services, clinic visits (drop-in and by appointment), and home visits.²¹⁵ With many providers and many groups providing care, and with a lack of coordination across settings, postpartum care runs the risk of fragmentation. As most women who give birth return home after a very short stay in the hospital or birthing centre, the coordination of support in the community is critical.

Planning postpartum care locally allows for the greatest efficiency and effectiveness. NICE guidelines recommend having a coordinating health care professional for each postpartum case and a documented, individualized care plan developed with the woman.²⁴ It is essential that mothers and families know about the specific community supports that are available to them in their area, perhaps in the form of a handout or website that lists the information.

While access to professional postpartum support within the community is essential for positive health outcomes for women, children, and families, social support networks have been identified as one of the key determinants of health.²⁹¹ It is also important that women have access to their own social support networks. Social media provides the opportunity for women to form virtual groups for support and information sharing. They can also access a variety of websites with evidence-based information, such as those of PHAC, provincial/

territorial governments, and professional organizations, that can provide answers to questions on self and baby care. HCPs can help women identify the websites or social media sites that may be helpful and those that would be best to avoid because they are neither helpful nor evidence-based.

Optimally, planning for the postpartum period starts during pregnancy. Prenatal education classes may provide a source of postpartum support from other families going through the same experiences.²⁹²

[Appendix B](#) provides descriptions of innovative international and Canadian postpartum care models and guidelines. Refer to [Appendix C](#) for an outline of the various methods used to deliver postpartum care in the community.

6.2 ONGOING POSTPARTUM CARE OF THE MOTHER AND BABY

Continued postpartum support and care needs to be provided according to the principles of family-centred care. It is important to determine and respect the woman's and family's views, beliefs, and values. The mother should be fully involved in determining the timing and content of each postpartum contact with HCPs so that the care she receives meets her and her baby's needs and is flexible.^{24,41}

At each postpartum encounter, the mother and her partner should have the opportunity to express their feelings and concerns and talk about their physical and emotional well-being, breastfeeding, rest, pain or discomfort and any concerns to do with the baby. These encounters provide HCPs with the opportunity to explore how the mother is coping with her daily experiences and her family and social supports, and to encourage women and their families or partners to talk about any changes in mood, emotional state, and behaviour that are outside of the woman's normal pattern.²⁴ HCPs will want to be aware of and look out for the signs of emotional health problems that occur during the weeks and months following birth.

Professionals have developed a number of methods—written standards of care, care plans, maps or paths, managed care, among others—to ensure that criteria for maternal and newborn health and adjustment are observed during the postpartum period. These criteria, also called *indicators* or *outcomes*, include specifics about the mother, the baby, and the family’s social or home support system. While these tools are useful, the focus should always be on supporting the mother and baby’s transition based on their individual needs and experiences.

6.3 INTIMATE PARTNER VIOLENCE AND CHILD MALTREATMENT

HCPs are ideally positioned to recognize signs of family violence, including intimate partner violence, as well as child exposure to intimate partner violence and other types of child maltreatment. These forms of violence can negatively impact the health of mother and child, and the effects can persist over time. It is important that providers be equipped to recognize and respond safely to situations involving family violence, and to ensure that their interactions or interventions do not revictimize the mother or child.

According to the Maternity Experiences Survey, about 1 in 10 women who have given birth reported experiencing one or more acts of violence in the past 2 years, most often being pushed, grabbed, or shoved in a way that could have hurt them.²¹⁵ Over half (52%) identified their partner, husband, or boyfriend as the perpetrator of this violence. One-third (31%) experienced the violence during pregnancy, and 16% reported that the violence increased after the birth of the baby, 52% that it decreased, and 32% that it stayed the same. Of those women who experienced abuse, 61% reported discussing or receiving information about what to do if they experienced abuse.²¹⁵

Intimate partner violence has been associated with mental health disorders for women, most commonly depression and anxiety disorders, and PTSD. Other effects on mental health include poor self-esteem, sleep disorders, eating disorders, phobias and panic disorders, substance dependence, antisocial personality disorders, and psychosis.²⁹³ Intimate partner violence is also associated with postpartum depression.²⁹⁴

Child maltreatment includes physical, sexual, and emotional/psychological abuse as well as neglect. Exposure to intimate partner violence is also a form of child maltreatment.²⁹⁵ Child maltreatment is a major public health issue associated with a broad range of negative health outcomes across the life course. Approximately one-third of Canadian adults (32%) report experiencing physical abuse, sexual abuse, and/or exposure to intimate partner violence before the age of 16 years.²⁹⁶

Provincial/territorial child welfare legislation considers exposing a child to intimate partner violence/family violence a form of maltreatment, and HCPs are required to report it.²⁹⁶

Violence in the home has a negative impact on babies, whether they experience it directly, for example, receive an injury while held during physical violence, or indirectly, due to their dependence on their primary caregivers for emotional support.²⁹⁷ When the primary caregiver is involved in a stressful event, the child’s main source of comfort is a source of fear and distress. This repeated pattern can result in disorders of attachment, which may contribute to behaviour problems in later childhood. Babies and young children who experience repeated violence in the home have reduced capacity to regulate their emotions and behaviour because of their lack of emotional security.²⁹⁷

Adverse Childhood Experiences (ACEs) research has shown that traumatic childhood events such as abuse, neglect, and household dysfunction are linked to an increased likelihood of developing physical, behavioural, and social problems in adulthood.²⁹⁸

Canadian and WHO guidance do not recommend universal screening for intimate partner violence.^{299,300} HCPs are well-positioned to inquire about intimate partner violence when assessing conditions that may have been caused or complicated by violence. In the context of perinatal care, HCPs should consider asking about intimate partner violence during assessment and subsequently as needed.³⁰⁰

Before inquiring about intimate partner violence, certain conditions of safety must be met. Safe responses to an adult's disclosure follow the LIVES protocol: Listening; Inquiring about needs and concerns; Validating; Enhancing safety; and providing a variety of Supports.³⁰¹ The HCP will want to speak with the postpartum woman separately from her partner and any verbal children, and assess her (and any children's) risk of immediate danger. After intimate partner violence is disclosed and immediate safety is discussed, assess the need for follow-up, considering what care and support is available, as well as the person's strengths, needs, priorities, and preferences.³⁰⁰

6.4 MOTHER'S NUTRITION AND HEALTHY WEIGHT

Postpartum nutrition and achieving a healthy weight following a pregnancy can impact maternal and child health both in the short and the long term. The SOGC states that postpartum women can achieve optimal nutrition by eating a variety of high quality foods and following the advice in *Canada's Food Guide*.

Breastfeeding women have higher energy needs and should therefore eat a little more food each day than non-breastfeeding women. *Canada's Food Guide* recommends regular intake of vegetables, fruit, whole grains, and protein foods. Deficiency of certain nutrients, including thiamin, riboflavin, vitamin B6, vitamin B12, choline, vitamin A, vitamin D, selenium, and iodine, can adversely affect the concentration in breastmilk.³⁰² Health Canada recommends that all women who could become pregnant, including breastfeeding women, take a daily multivitamin containing 400 mcg (0.4 mg) of folic acid.³⁰²

Some women, for example those who live in low income, Indigenous women or women who are newly arrived in Canada or refugees, may be at higher risk of nutritional challenges.^{303,304} A lack of access to nutritious food, or to knowledge about nutritious food, can compromise women's and families' abilities to eat adequately. It is important that women receive nutritional counselling that is relevant to their specific needs and culture.

Refer to the SOGC guideline *Canadian Consensus on Female Nutrition: Adolescence, reproduction, menopause, and beyond* for components of the maternal diet that may affect those babies who are breastfeeding.³⁰⁵

Postpartum weight

Weight loss during the postpartum period should be gradual. There is little evidence that gradual weight loss affects the volume and quality of breastmilk once lactation is established.³⁰⁵ The SOGC emphasizes the need for optimal nutrition to achieve a healthy body weight postpartum. Postpartum visits can be opportunities to check on weight retention/reduction, healthy eating habits, and exercise.

Refer to the SOGC guideline *Canadian Consensus on Female Nutrition: Adolescence, reproduction, menopause, and beyond* for more information.³⁰⁵

HCPs are well positioned to recognize circumstances that are cause for concern; for example, a sudden, rapid weight loss or, conversely, if a woman is living with obesity. The scientific knowledge about obesity and its treatment has led to the recognition that obesity is an illness and not a product of an inadequate lifestyle. It is important to avoid shaming and stigma.³⁰⁶

Refer to the SOGC guideline *Obesity in Pregnancy* for recommendations on the counselling and care of women who have obesity.

6.5 SEXUALITY AND CONTRACEPTION

Many factors influence a woman's sexuality during the postpartum period: her culture, her experience before and during pregnancy, her relationship, her physiology, and her emotional and psychological state.³⁰⁷ This is compounded by the experience of giving birth, fatigue, the physical recovery from labour and birth, the changes her body is undergoing postpartum, caring for her baby, and perineal pain or discomfort.

Faced with the physiological and emotional changes of becoming new parents, intimacy may be challenging for women and their partners to maintain postpartum, but it remains important for the health of their relationship. Both women and providers often find it difficult to discuss postpartum sexual changes, adjustment, and intimacy. However, sexual concerns are common among women, and they welcome their HCP raising the topic and offering support regarding any concerns that she and her partner may have.^{308,309}

Low or no sexual desire is very common during the postpartum period. A lesser interest in sexual activity than before or during pregnancy is the norm during the first few months to a year after childbirth.^{310,311}

Between 22% and 86% of women experience changes in sexual functioning postpartum, especially those who have had an assisted vaginal birth as opposed to a spontaneous vaginal birth or caesarean birth.³¹² A number of studies have linked episiotomy or perineal lacerations and operative vaginal birth with dyspareunia, which can persist for a number of months.^{313,314} Women who have had a caesarean birth may also have discomfort with intercourse.^{312,315}

Refer to the SOGC *Female Sexual Health Consensus Clinical Guidelines* and *Sexual and Reproductive Health Counselling by Health Care Professionals* for information on the assessment and sexual health care of postpartum women.

Contraception and Prevention of Sexually Transmitted Infection

Postpartum women need information about contraception and preventing sexually transmitted infections (STIs), and about what methods are compatible with breastfeeding. In this regard, the SOGC recommends the following:^{316,317}

- Lactational amenorrhea method (LAM) can be used for the first 6 months if the woman's periods have not returned and the baby is exclusively breastfed on demand day and night and is not fed other foods or liquids.³¹⁸ The woman will need to use another form of birth control once her period returns or the baby is older than 6 months, is no longer exclusively breastfeeding, is sleeping through the night, or has long intervals between breastfeeding.³¹⁸
- Postpartum women may be candidates for an IUC, which can be inserted immediately after delivery. However, women are at a higher risk for uterine perforation during insertion of the IUC in the first postpartum year.
- Hormonal contraceptives can be used by non-breastfeeding women from 3 to 4 weeks after they give birth. Some hormonal birth control methods may decrease milk production, but the progestin-only birth control pill does not appear to interfere with lactation. Currently available combined estrogen-progestin birth control pills do not interfere with the quantity or quality of breast milk once feeding is established.
- Condoms are an effective contraceptive option for breastfeeding and non-breastfeeding women. Condoms also protect both partners from STIs.

Refer to the SOGC guidelines *The Canadian Contraception Consensus Guidelines* for guidance on the use of contraceptive methods in postpartum and breastfeeding women to prevent pregnancy and STIs.

6.6 IMMUNIZATION

Immunization is a proven cost-effective public health intervention that prevents significant illness, disability, and death.³¹⁹ Vaccines work best when they are given on time, beginning in infancy. Children are immunized early in life because they are vulnerable to diseases and the consequences can be very serious. The vaccination schedule is designed to protect babies and children before they are exposed to vaccine-preventable diseases.

Periodic outbreaks of illnesses such as measles, which can cause death or disability, can result because not all Canadians are immunized.³²⁰ PHAC reports that 23% of children have not received the full four recommended doses of the diphtheria, whooping cough (pertussis), and tetanus vaccine by the time they are 2 years old.³²¹ In the last 10 years, the number of measles outbreaks has increased in several provinces, with five of the outbreaks involving more than 10 cases. These outbreaks are largely a result of the importation of the virus from other countries, with vulnerable children, including those who are not immunized, contracting the illness.³²²

Some parents may be hesitant or resistant to immunizing their babies. The reasons behind children not being fully immunized are complex and context-specific and often community-specific. A vocal few hold anti-vaccine views; they are not the main reason for the lack of coverage, although the number of vaccine-hesitant parents is growing. Some are complacent, taking vaccination rates and herd immunity for granted; some have doubts

about the safety or necessity of vaccines, having been convinced by misinformation about adverse effects; while others do not get their children immunized because of the time and effort it can take to do so or they are concerned about the injections causing pain.³²³

The CPS recommends that HCPs acquire the knowledge and skill to work with parents who are hesitant about immunization. Parents often look to HCPs for answers to their questions about immunization. HCPs will want to share evidence-based information about babies' vaccinations in a manner that is easy for parents to understand and explore any reasons families may have for not immunizing.³²⁴ Connecting with parents in order to maintain trust and keep the lines of communication open is critical. Each parent requires different information geared to his or her specific needs.

It is important to understand a parent's specific concerns and to demonstrate care and compassion for both the child and the family. Telling stories about vaccine-preventable disease cases in Canada can help educate parents. Taking the time to convey information clearly, calmly, and effectively can make the difference whether a child is immunized.³²⁵

Refer to the CPS practice point *Working with vaccine-hesitant parents* for more information.



The *Canadian Immunization Guide*, based on guidance from the National Advisory Committee on Immunization (NACI), provides guidelines for immunization of babies, children, youth, and adults, as well as specific recommendations for postpartum and breastfeeding women. The *Canadian Immunization Guide* includes the schedule for the following vaccinations for babies and toddlers up to 18 months:

- Diphtheria, tetanus, pertussis, polio
- Haemophilus influenza type b
- Rotavirus
- Pneumococcal disease
- Influenza
- Meningococcal disease
- Measles
- Mumps

- Rubella
- Varicella
- Hepatitis B

Although NACI makes recommendations at the national level, provinces and territories determine specific programs and schedules. As such, HCPs need to refer to the immunization schedules of their respective jurisdictions.

It is critical that all siblings, parents, grandparents, other family members, and visitors have all their immunizations up-to-date when a baby comes home. This is particularly important if the baby or mother have underlying medical conditions or vulnerabilities that would increase their risk of communicable diseases like whooping cough and influenza.



CONCLUSION

The birth of a baby involves many transitions and adaptations for the woman, the baby, and the family. Parents feel many different things following the birth of their baby—joy, wonder and happiness, as well as anxiety, worry and fatigue. These are all normal feelings. Mothers adapt physically and psychologically following birth as they face lack of sleep, physical discomfort or pain and relationship changes. Caring for a baby is demanding, requiring many adaptations for parents. While the postpartum period is a normal, healthy time of life, it is also challenging for families, even as parents get comfortable with their roles.

Providing family-centred maternity and newborn care to women, their partners, and families during the postpartum period is an essential component of the care offered by all institutions, agencies, and programs. It is important that HCPs focus on the individual needs and values of the mothers, partners, newborns, and families they are working with. As women, their partners, and immediate families develop attachment and confidence in caring for their newborn babies, they will also require support from extended family and friends, in addition to providers and community programs.

APPENDIX A—ADDITIONAL RESOURCES

CLINICAL PRACTICE GUIDELINES RELATING TO POSTPARTUM HEALTH

Alberta Health Services

www.albertahealthservices.ca/assets/about/scn/ahs-scn-mncy-pp-nb-pathway.pdf

Canadian Paediatric Society

www.cps.ca/en/documents/authors-auteurs/fetus-and-newborn-committee

Manitoba Health, Healthy Living and Seniors

www.gov.mb.ca/health/publichealth/phnursingstandards/docs/Postpartum_Nursing_Care_Pathway.pdf

www.gov.mb.ca/health/publichealth/phnursingstandards/index.html

Ontario—Provincial Council for Maternal and Child Health

www.pcmch.on.ca/health-care-providers/maternity-care/quality-based-procedures-clinical-practice-guidelines/clinical-practice-guidelines

Perinatal Services BC

www.perinataleservicesbc.ca/health-professionals/guidelines-standards/maternal

www.perinataleservicesbc.ca/health-professionals/guidelines-standards/newborn

Reproductive Care Program of Nova Scotia

<http://rcp.nshealth.ca/clinical-practice-guidelines>

Society of Obstetricians and Gynaecologists of Canada

www.jogc.com/current-guidelines-english

BREASTFEEDING

Agence de la santé et des services sociaux de la Capitale-Nationale—Guide pratique en allaitement pour les médecins

<http://collections.banq.qc.ca/ark:/52327/bs1971954>

Baby-Friendly Newfoundland & Labrador—Physician’s Toolkit Breastfeeding: Quick Reference Guide

<https://babyfriendlynl.ca/app/uploads/2019/01/BFToolkitQuickReference.pdf>

Best Start—Breastfeeding Guidelines for Consultants—Desk Reference

<https://resources.beststart.org/product/b03e-breastfeeding-guidelines-for-consultants>

Health Canada—Nutrition for Healthy Term Infants

www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding.html

Public Health Agency of Canada—Protecting, Promoting and Supporting Breastfeeding: A Practical Workbook For Community-based Programs

www.canada.ca/en/public-health/services/health-promotion/childhood-adolescence/publications/protecting-promoting-supporting-breastfeeding.html

Toronto Public Health—Breastfeeding Protocols for Health Care Providers

www.toronto.ca/wp-content/uploads/2017/11/9102-tph-breastfeeding-protocols-1-to-21-complete-manual-2013.pdf

CULTURE

Best Start—Giving Birth in a New Land: Strategies for Service Providers Working with Newcomers

<https://resources.beststart.org/product/e26e-giving-birth-in-new-land-manual>

Canadian Nurses Association—Promoting Cultural Competence in Nursing

https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/position_statement_promoting_cultural_competence_in_nursing.pdf?la=en&hash=4B394DAE5C2138E7F6134D59E505DCB059754BA9

ENVIRONMENTAL HEALTH

Best Start—Playing it Safe—Service Provider Strategies to Reduce Environmental Risks to Preconception, Prenatal & Child Health—Manual

www.beststart.org/resources/env_action/pdf/envirostrategies_rev.pdf

Health Canada—Our Health, Our Environment: A Snapshot of Environmental Health in Canada

http://publications.gc.ca/collections/collection_2013/sc-hc/H129-18-2012-eng.pdf

HEALTHY WEIGHT/NUTRITION/PHYSICAL ACTIVITY

Canadian Society for Exercise Physiology—Guidelines

<https://csepguidelines.ca/>

Health Canada—Canada’s Food Guide: Canada’s Dietary Guidelines

<https://food-guide.canada.ca/en/guidelines/>

Health Canada—Canadian Nutrient File

<https://food-nutrition.canada.ca/cnf-fce/index-eng.jsp>

INDIGENOUS HEALTH

Anishnawbe Health Toronto—Aboriginal Cultural Safety Initiative

www.aht.ca/component/content/article/91-acsi/104-aboriginal-cultural-safety-initiative

Best Start—Atuaqsijut: Following the Path Sharing Inuit Specific Ways

www.beststart.org/resources/howto/pdf/K84-AtuaqsijutFollowingThePath.pdf

Best Start—Open Hearts Open Minds

www.beststart.org/resources/howto/pdf/OHOM.pdf

Best Start—Pimotisiwin—A Good Path for Pregnant and Parenting Aboriginal Teens—Report
www.beststart.org/resources/rep_health/pimotisiwin_oct.pdf

Best Start—Supporting the Sacred Journey: From Preconception to Parenting for First Nations Families in Ontario
www.beststart.org/resources/rep_health/pdf/SupportingtheSacredJourney.pdf

Provincial Health Services Authority in British Columbia—Indigenous Cultural Safety Training
www.culturalcompetency.ca

Society of Obstetricians and Gynaecologists of Canada—Aboriginal Sexual Health
www.aboriginalsexualhealth.ca

INTIMATE PARTNER VIOLENCE

VEGA Project
<https://vegaproject.mcmaster.ca>

World Health Organization—Violence Info
<http://apps.who.int/violence-info/intimate-partner-violence/>

LGBTQ2

Best Start—Welcoming and Celebrating Sexual Orientation and Gender Diversity in Families, From Preconception to Preschool
www.beststart.org/resources/howto/pdf/LGBTQ_Resource_fnl_online.pdf

Gay and Lesbian Medical Association—Guidelines for Care of Lesbian, Gay, Bisexual and Transgender Patients
<https://npin.cdc.gov/publication/guidelines-care-lesbian-gay-bisexual-and-transgender-patients>

The Joint Commission—Advancing Effective Communication, Cultural Competence, and Patient—and Family-Centered Care for the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community: A Field Guide
www.jointcommission.org/lgbt

MATERNAL AND NEWBORN ASSESSMENT AND CARE

Perinatal Services BC—Newborn & Postpartum Toolkit
www.perinatalservicesbc.ca/health-professionals/professional-resources/pathways-toolkits/newborn-postpartum-toolkit

Rourke Baby Record
www.rourkebabyrecord.ca/default

The American College of Obstetricians and Gynecologists—ACOG Postpartum Toolkit
www.acog.org/-/media/project/acog/acogorg/files/pdfs/publications/2018-postpartum-toolkit.pdf

MEDICATIONS

Centers for Disease Control and Prevention—Treating for Two

www.cdc.gov/pregnancy/meds/treatingfortwo/

Health Canada—Drug Product Database

www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/drug-product-database.html

Info-Médicaments en Allaitement et Grossesse

www.chusj.org/en/soins-services/P/Pharmacie/Centre-IMAGE

Merck Manual—Professional Version

www.merckmanuals.com/professional

MotherToBaby

<https://mothertobaby.org>

MENTAL HEALTH

Best Start—Perinatal Mood Disorders: An Interdisciplinary Training Video

<https://resources.beststart.org/product/m08e-perinatal-mood-disorders-training-video>

Public Health Ontario—Perinatal Mental Health Toolkit

www.publichealthontario.ca/en/health-topics/health-promotion/maternal-infant-health/hhdt

Registered Nurses' Association of Ontario—Assessment and Interventions for Perinatal Depression

<https://rnao.ca/bpg/guidelines/assessment-and-interventions-perinatal-depression>

Saskatchewan Prevention Institute—Resource Catalogue

<https://skprevention.ca/product-category/mental-health>

ORAL HEALTH

Saskatchewan Prevention Institute—Improving the Oral Health of Pregnant Women and Young Children

http://skprevention.ca/wp-content/uploads/2016/07/2-805_Oral_Health_Fact_Sheet.pdf

SUBSTANCE USE

Best Start—Prescription Opioid Use

<https://resources.beststart.org/product/a33e-prescription-opioid-use-guide/>

MotherToBaby

<https://mothertobaby.org>

Perinatal Services BC & British Columbia Centre on Substance Use—Treatment of Opioid Use Disorder During Pregnancy: Guideline Supplement

www.bccsu.ca/wp-content/uploads/2018/06/ODU-Pregnancy.pdf

Portico—Primary Care Addiction Toolkit: Opioids misuse and addiction

www.porticonetwork.ca/web/opioid-toolkit

Saskatchewan Prevention Institute—Neonatal Abstinence Syndrome

<https://skprevention.ca/resource-catalogue/infants/neonatal-abstinence-syndrome>

TOBACCO

Best Start—Tobacco Misuse Resources

<https://resources.beststart.org/product-category/resources/tobacco-misuse>

CAN-ADAPTT—Guidelines and resources

www.nicotinedependenceclinic.com/English/CANADAPTT/Pages/Home.aspx

CAN-ADAPTT—Pregnets

www.nicotinedependenceclinic.com/en/pregnets

Canadian Public Health Association—Stop Smoking: A Smoking Cessation Resource for Those Who Work with Women

www.cpha.ca/stop-smoking-smoking-cessation-resource-those-who-work-women

Portico—Primary Care Addiction Toolkit: Smoking cessation

www.porticonetwork.ca/web/smoking-toolkit

Registered Nurses' Association of Ontario—Supporting Pre- and Postnatal Women and Their Families Who Use Tobacco

<https://rnao.ca/bpg/courses/supporting-pre-and-postnatal-women-and-their-families-who-use-tobacco>

Saskatchewan Prevention Institute—Environmental Tobacco Smoke: The Risk to Unborn Babies, Pregnant Women and Children

http://skprevention.ca/wp-content/uploads/2016/07/3-306_Tobacco_Smoke_Booklet.pdf

APPENDIX B—LEARNING FROM OTHERS’—POSTPARTUM CARE MODELS AND GUIDANCE

The Netherlands

The Netherlands has a system for postpartum care provided by *kraamverzorgenden*—maternity home care assistants. Trained caregivers visit the home of new parents and observe the mother and her baby, offer information in baby care and feeding, and even help in household chores, shopping, and if necessary, cooking. The service is popular and, because of a recent shortage of *kraamverzorgenden*, the average number of hours of maternity home care assistance over the first 8 days after normal childbirth has decreased from 64 to 44 hours.³²⁶

As a result of guidelines developed by government, insurance companies, and professional organizations, maternity care in the Netherlands is considered “remarkable for its degree of cooperation between caregivers at different levels and locations in the system.³²⁶” Pregnant women can move freely between care settings and caregivers, including midwives, general practitioners, and specialists.

France

Most babies are born in hospital in France. When families leave the hospital, they are given the telephone number of the nursery nurse in their area and are encouraged to call with any questions or concerns. Newborn babies are issued with a health record book that contains all their medical information—including vaccinations—up to age 16 years. The health record book is considered an essential document, and it aids the communication process between HCPs and families.³²⁷

Compulsory medical examinations of children are carried out regularly. The first is within 8 days of birth, another is in month 9 or 10, and the last during month 24 or 25. Mothers and children can access interdisciplinary mother and baby care (“Protection maternelle et infantile”) at local maternal and child health clinics. Clinic staff conduct postnatal checks, provide nutritional and health advice, and can administer vaccinations.³²⁷

Canada

Nova Scotia—Healthy Babies, Healthy Families: Postpartum & Postnatal Guidelines

The Government of Nova Scotia’s *Healthy Babies, Healthy Families: Postpartum & Postnatal Guidelines* provide guidance for the organization of postpartum services. These guidelines were developed to enhance and support the provision of high quality care to women, their babies, and their families across Nova Scotia in the first 6 weeks postpartum. They contain recommendations that focus on physiological stability, infant feeding or nutrition and growth monitoring, psychosocial/family adjustment, parent-child attachment/parenting, building on capacities and strengths, transition to home and community, family access to community support, healthy lifestyles and environments, collaborative practice, and professional competency.³²⁸

Ontario—Standards of Postnatal Care

The *Standards of Postnatal Care* articulate the criteria of postnatal care for mothers and babies in Ontario in immediately postpartum. The Standards identify models, methods, or systems for improving coordination of care along with an evaluation framework to monitor their impact. To support the implementation of the *Standards of Postnatal Care*, another report was developed: *Standards of Postnatal Care for Mothers and Newborns in Ontario (Part II): A focus on implementation and evaluation*. This report provides an overview of implementation recommendations to enhance the delivery of postnatal care. It also includes a suggested evaluation framework that identifies priority standards for monitoring across the province.⁴²

Ontario—Monarch Centre—Ottawa

The Monarch Centre is a multidisciplinary maternal and newborn health clinic providing evidence-based comprehensive care. Following the birth and discharge from hospital, babies born at the Ottawa Hospital and their mothers can be referred to the Monarch Centre for their first 24- to 48-hour check-up. The registered nurses, board-certified lactation consultants, and family doctors at the Monarch Centre specialize in maternal and newborn care, and provide all the necessary breastfeeding support, bilirubin checks for jaundice, newborn screening and full postpartum check-ups, services and follow-up for mother and baby.

The Monarch Centre coordinates discharge directly with hospital providers to make sure that mother and baby are discharged when ready—and when it is medically appropriate. Upon coordinated discharge from hospital, Monarch supports the transition home for the new family.³²⁹

British Columbia—The Nurse–Family Partnership

The Nurse–Family Partnership (NFP) is an intensive home-visiting program designed to help young first-time mothers and their children. A public health nurse visits women enrolled in the program throughout their pregnancy and until their child reaches 2 years of age. The goals are to improve children’s health and development while improving mothers’ life situations.

McMaster University in Ontario ran a pilot study of the NFP program, and British Columbia is conducting a randomized controlled trial evaluation. In the USA, the program has demonstrated improved parenting, reduced injuries and poisonings, and improved emotional and language development by babies. The mothers have also been found to have benefitted, with greater participation in the workforce and less reliance on social assistance.^{330,331}

APPENDIX C—METHODS USED TO DELIVER POSTPARTUM CARE IN THE COMMUNITY

Drop-In Clinics: Usually staffed by nurses, midwives, and lactation consultants, postpartum clinics are geared to mother/baby drop-ins or scheduled visits. The clinic program can be structured for health assessment, health concerns, breastfeeding support, and advice.

Home Visits: A traditional follow-up component of maternal and newborn care is the home visit by either a nurse or midwife. The length and frequency of visits vary according to the needs of the family and the program specifications. Referrals for home visits are made by the hospital or community liaison staff or by the mother herself; often, they are governed by the “urgency” rating of the assessed need. In some areas, home visiting has been discontinued or replaced with community-based supports that the mother must transit to. Some hospitals have initiated home follow-up by their childbirth staff for mothers in need, as identified by risk criteria or need for additional support. Some home-visiting models use a combination of professional and paraprofessional visitors.

Online: Online resources for postpartum information include social media, websites, and blogs. Online resources enable mothers to engage with other mothers, share experiences, and attain information on caring for themselves and their newborn.

Parenting Courses: As with prenatal classes, some parents benefit from group or individual discussions on parenting during the postpartum period and learn more about their roles as parents through these.

Peer Support: Mother-to-mother support provided in various ways—in person, over the phone, via social media or texts. The supporter is or was in a similar situation to the peer. Some peer-to-peer support deals with specific topics such as breastfeeding or postpartum depression, while others provide general postpartum support.

Phone Lines: Some provinces and communities have initiated phone support and advice for new parents. Parents can ask questions, sometimes day or night, about personal, parenting, and postpartum health concerns. Questions usually relate to breastfeeding, crying, coping at home, and community resources. Phone lines can be connected to general health lines or hospital postpartum wards, or run by public health units or community-based organizations.

Physician/Midwife: Follow-up assessments by the physician, midwife, or other HCP in the community or home. Scheduling/timing of visits depends on general maternal and newborn health; complications of pregnancy, birth, and the postpartum period; and available family/community supports.

Telephone Follow-up: A phone call from public/community health nurses or midwives can ensure that the postpartum plan is in place and working well. Specific outcomes related to feeding and mother and baby well-being can be addressed. The telephone interview may result in a referral to a community agency for service, such as a home visit or other follow-up.

The Canada Prenatal Nutrition Program (CPNP) is a Government of Canada program that provides funding to community groups to help improve the health of pregnant women and new mothers and their babies who face, for example, poverty, teen pregnancy, social and geographical isolation, substance use, or family violence, which put their health at risk. CPNP aims to improve the health of women and their babies by increasing the number of babies born at a healthy weight and promoting and supporting breastfeeding. It ensures culturally sensitive prenatal support for Indigenous women and women who have recently immigrated. The program provides nutrition counselling, prenatal vitamins, food, food coupons and food preparation training, counselling in prenatal health and lifestyle, breastfeeding education and support, education and support on baby care and child development, and referrals to other agencies and services.³³²

The Community Action Program for Children (CAPC) is another Government of Canada program that provides funding to community groups whose focus is the promotion of the healthy development of families (with children from birth to 6 years old) who face challenges that put their health at risk—poverty, teen parenting, social and geographical isolation, substance use, and family violence. The program aims to improve healthy child development by improving parenting skills and parent–child relationships; decreasing social isolation; increasing child self-esteem; and providing child-focused activities. Their programs may include nutritional support and collective kitchens; family resource centres; parenting classes and drop-in groups; child health and development activities; outreach and home-visiting programs; and specialized programs, such as support for mothers dealing with substance use.³³³

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