Guidelines for Care of Women With Perinatal Substance Use Concerns and Their Infants

November 2008

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GOAL OF THE GUIDELINE

To guide early antenatal intervention for women with problematic substance use and to promote a successful transition of those women and their infants from hospital to home.

Key elements of a successful transition plan include:

- appropriate community supports in place;
- a physiologically stable infant;
- active parent/caregiver involvement and preparation for post-hospital care;
- a caregiver that can provide a safe and appropriate environment.

BACKGROUND

The care of newborn infants with prenatal drug and alcohol exposure has been widely recognized as a significant health issue in British Columbia. These infants present a unique and complex mix of medical and social needs that require a comprehensive discharge plan *(BCRCP, 1999)*. Clear discharge planning guidelines were developed in the north and south regions of Fraser Health to guide the safe transition of substance-exposed infants from hospital to home *(Simon Fraser, 2003; Fraser South, 2002)*. However, the following initiatives in Fraser Health have prompted revision of the guidelines to include the prenatal period.

- Maxxine Wright Community Health Centre (MWCHC) provides a variety of health and social support services to women and their children who have been impacted by substance use and/or violence or abuse.

- The Ministry of Children and Family Development (MCFD) recognizes the importance of early intervention and prevention when life situations of pregnant women may present future risk to a developing child *(Fraser Region MCFD Policy and Procedure #2006-03 OP)*.

- Health Promotion and Prevention in Fraser Health developed the Best Beginnings Program to improve maternal, infant, and family health and well-being for targeted populations.

This guideline is intended to be used in conjunction with the current British Columbia Perinatal Health Program (BCPHP) guidelines and provides information to all members of the interdisciplinary team who deliver care to women and infants impacted by substance use. When additional care and support are offered in the antenatal period, it may positively influence a successful transition of women and infants from hospital to home. This information will facilitate discharge planning aimed at ensuring the safety and well being of the infant, the mother, and/or alternate caregivers in the community.

OBJECTIVES OF EARLY INTERVENTION AND DISCHARGE PLANNING

1. To begin coordination of community resources in the antenatal period to provide early support and ensure continuity of care.

2. To support the parent/caregiver to develop the skills and confidence needed to care for the infant.

3. To facilitate appropriate resource utilization post-hospital discharge by matching the needs of the infant, parents, family and/or alternate caregiver(s) to the most appropriate services.

See **Appendix A** for a care **Flow Chart** for Women with Perinatal Substance Use Concerns and Their Infants. The flowchart illustrates early intervention for women when problematic perinatal substance use is recognized, in-hospital birth and mother/infant care, discharge planning, and follow-up in the community.

GUIDING PRINCIPLES: See BCRCP Guidelines (1999) for Principles of Perinatal Care for Substance Using Women and their Newborns.

1. Women with substance use concerns are encouraged to participate in their own care, in their baby's care, and in discharge planning for both themselves and their babies *(Burry & Wright, 2006; Weaver, 2007)*.

2. Information about the potential risks of substance use in pregnancy and available options and resources is necessary for women to make informed decisions *(Health Canada, 2000)*.

3. Harm reduction is the most promising approach to reducing drug-related harm to women, their babies, and society. A punitive approach results in further suffering of women and their infants because women are reluctant to access health care services *(Boyd, 2007)*. For more information on harm reduction, see *BC Health Files #102; July 2007*.

4. The safety and well being of a mother and her baby is of primary importance. Early involvement of the interdisciplinary team is essential to reduce the negative impact of socioeconomic deprivation on pregnancy outcomes for both mother and baby *(Marcellus & Kerns, 2007)*.

5. All health care providers are obligated to intervene where negative attitudes from other staff or patients are expressed towards women with substance misuse concerns *(Code of Ethics: BRSW, 2006; CNA, 2008; CMA, 2004)*.

COMPONENTS OF EARLY INVOLVEMENT

Prenatal Registration

Prenatal registration in Fraser Health is a component of the Best Beginnings Prenatal Program and is aimed at early involvement and contact with high risk pregnant women. The purpose of prenatal registration is to identify concerns and connect pregnant women with community resources any time after 20 weeks gestation. It is the start of discharge planning. Pregnant women complete a questionnaire and their concerns are followed-up with a phone call by a public health nurse. Some women may continue to receive care through the Best Beginnings Prenatal Program or at Maxxine Wright Community Health Centre.

Best Beginnings Prenatal Program

Public health nurses contact and follow up with clients referred to the Best Beginnings Prenatal Program within Fraser Health. Referrals to the public health nurses usually come from physicians, pre-registration programs, Canadian prenatal nutrition programs, and pregnancy outreach programs.

Maxxine Wright Community Health Centre (MWCHC)

Maxxine Wright Community Health Centre follows a women-centred, harm reduction approach. Women do not require a referral to MWCHC and are welcome to drop in without an appointment. At the time of intake, women whose lives are impacted by substance use and/or violence/abuse must be pregnant or have a child under the age of two. Services available at MWCHC include:

- public health nurses;
- nurse practitioner;
- MCFD social worker;
- addictions counsellor;
- wraparound coordinator;
- dental hygienist, nutritionist;
- family doctor.

Some outreach services are also available.
Location: 13729 92nd Avenue, Surrey. Telephone: 604.587.3835; Fax: 604.581.3908

Early Involvement of MCFD or Delegated Aboriginal Agency

- Under Section 14 of the *Child, Family and Community Service Act*, every person has a duty to report situations where they have a reason to believe that a child needs protection. That "duty to report" does not become a legal requirement until a child is born. While early involvement is preferable for better outcomes for both the woman and the child, when a pregnant woman discloses her substance use to a member of the health care team, the disclosure must remain confidential and not be reported to MCFD without the woman's consent. It is up to the woman to determine who shall be told of her condition, and in what detail *(Code of Ethics: BRSW, 2006; CNA, 2008; CMA, 2004)*.

- Under the Fraser Region MCFD Policy and Procedure # 2006-03 OP, if a pregnant woman who uses substances contacts MCFD, a child protection social worker will offer support service referrals aimed at reducing the risk of harm to her expected child and to support healthy family development.

- It is the responsibility of the MCFD protection social worker to develop a Risk Reduction Service Plan in partnership with the pregnant woman and her support network.

- Legislative authority for determining if children are in need of child protection is vested in the Director of Child Welfare. Early and ongoing support by MCFD or a delegated Aboriginal agency requires a cooperative relationship between these agencies and the woman. Establishing supports and gathering necessary resources prior to the child's birth can mitigate risks, build safety, and increase the likelihood of the woman's ability to care for her baby.

COMPONENTS OF IN-HOSPITAL CARE

Maternal Investigations

Maternal investigations require the woman's consent. In the event that a woman arrives on the maternity unit with no prior documented prenatal care, the following investigations are recommended *(BCRCP, 1999)*:

- CBC, Group and screen, Rubella, RPR, triple screen;
- HCV, HAV, Anti-HBsAb, Anti-HBc, AST, ALT, GGT;
- HIV ± HIV PCR (polymerase chain reaction);
- if HIV positive: do CD4 count, viral load, toxoplasmosis, CMV, Varicella;
- usual PAP and swabs for culture and chlamydia, gonorrhea, HSV, gram stain, and wet preparation for trichomonas;
- vaginal-rectal swab for Group B Strep.

With ongoing high risk behaviours:

- repeat HIV, HIV PCR, RPR, Hepatitis B antigen and Hepatitis C antibody in each trimester and/or admission;
- obstetrical ultrasound; repeat in two weeks for growth, and then as needed.

Urine drug screen:

- A urine drug screen (immunoassay methodology) does not provide absolute positives and negatives; it is simply a screening process that requires confirmation (liquid chromatography/mass spectrometry) of the substances detected *(Fraser Health, 2007)*.
- In cases where the clinical picture of substance use is unclear and a urine drug screen is ordered, obtain consent and collect the urine **PRIOR** to giving any medications.
- When substances are detected in a urine screen by immunoassay, the urine is sent to Provincial Toxicology for confirmation testing.
- A positive confirmation test is precise and reflects recent drug use.

- Provincial toxicology confirmation testing of the urine takes seven to ten days. Results are sent to the Fraser Health laboratory that requested the confirmation test and to Health Records. The ordering physician's name must be included on the urine screen requisition to ensure the physician will receive a copy of test results.
- Interpretation of results:
    - methadone is reported as "methadone," not as "opiate" on screen results;
    - heroin and codeine are reported as "opiates" on the urine screen results; further analysis at Provincial Toxicology is carried out to identify the specific drug (codeine or morphine);
    - occasionally analysis cannot be completed due to "interfering substances"; these specimens will not be sent to Provincial Toxicology for confirmation testing unless it is requested; "interfering substances" may result from many factors and cannot be assumed to be due to patient tampering with the urine specimen.

<u>Labour and Postpartum Pain Management</u>

Key Points *(Department of Family and Community Medicine, University of Toronto, 2005)*:

- Increased dosing may be required due to tolerance to opioids.
- Use any combination of the pain management options listed below.
- If the woman is on Methadone, maintain her regular dose.
- If the woman is experiencing withdrawal symptoms, treat the withdrawal.
- Naloxone may cause seizures related to abrupt drug withdrawal if given to an opioid dependent woman.
- Electronic fetal monitoring (EFM) may have minimal variability with opioid, alcohol, or sedative use. Fetal scalp blood sampling may be necessary to confirm EFM interpretation.
- Consider anaesthesia and pediatric consultations.
- Naloxone given to an opioid-exposed newborn may cause seizures related to abrupt drug withdrawal *(AAP, 1999)*. Use positive pressure ventilations for respiratory depression.

Pain Management Options for Labour:

- Support by caregivers, family, friends, doula
- Comfort measures
- Opioid analgesia (fentanyl, morphine) - various routes may be used
- Epidural anaesthesia

Contraindications for opioid-dependant women (mixed agonists-antagonists):

- Nubain (nalbuphine)
- Talwin (pentazocine)
- Stadol (butorphanol)
- Subutex (buprenorphine)

Postpartum Pain Management:

- Treat pain with ibuprofen and/or narcotics (e.g. oxycodone).
- Epidural or spinal narcotic after caesarean section is helpful.
- Consider patient controlled analgesia (PCA) or patient controlled epidural anaesthesia (PCEA), if available, after general anesthesia.

Rooming-in

- Rooming-in is preferred for all new mother-infant dyads *(Health Canada, 2000)*.

- When compared to methadone or heroin-exposed newborns who were separated from their mothers, rooming-in of methadone or heroin-exposed newborns was associated with:

    - less need for treatment of neonatal abstinence syndrome;
    - shorter length of stay in hospital;
    - a greater likelihood of being discharged from hospital in the custody of their mothers *(Abrahams, Kelly, Payne, Thiessen, Mackintosh, & Janssen, 2007)*.

- If the MCFD protection social worker or social worker from a delegated aboriginal agency removes an infant to the care of the Director of Child Welfare, a Child Removal Form *(Appendix B)* will be signed by the social worker and placed on the mother's and infant's charts. Visitation/supervision direction will be outlined on the Child Removal Form.

- The term "removal" is a legal term under the *Child, Family and Community Service Act*. **It is not a directive for automatic physical separation of the infant from his/her mother.** Separation would occur if advised by the MCFD social worker or social worker from a delegated aboriginal agency, or for medical reasons as ordered by the physician.

- Infants requiring treatment for acute withdrawal will require care in the Neonatal Intensive Care Unit until stable; however, parent participation in the infant's care is encouraged.

Care For the Mother When Her Baby Has Been Removed

- Regardless of the circumstances when a child has been removed, the experience must be acknowledged as a distressing and significant loss for the mother. As such, the care of the mother must be sensitive, respectful, and compassionate.

- Within the limits specified by the MCFD social worker/delegated aboriginal agency worker on the Child Removal Form, the mother is encouraged to spend time with her baby. The mother may wish to receive mementos of her baby or have a photo taken with her baby that she may take or leave with her baby.

- Encourage the mother to work with the MCFD social worker/delegated aboriginal agency worker as an active participant in her child's plan of care. When a child is in the care of the Director of Child Welfare, visitation and continued involvement by the mother is a critical child welfare service with numerous benefits to the child, mother, and society *(Burry & Wright, 2006; Weaver, 2007)*.

- Prior to discharge, offer the woman appropriate postpartum supports, such as postpartum depression services, Maxxine Wright CHC, physician follow-up, and other community agencies.

Withdrawal

- Withdrawal in neonates, otherwise known as Neonatal Abstinence Syndrome (NAS), is described as a generalized disorder characterized by signs and symptoms of central nervous system hyperirritability, respiratory distress, gastrointestinal dysfunction, and autonomic symptoms that include yawning, sneezing, mottling, and fever. While numerous reports describe NAS caused by heroin and methadone, many non-narcotic drugs are capable of causing fetal dependence and, consequently, withdrawal. Barbiturates, selective serotonin reuptake inhibitors (SSRIs), minor tranquilizers, stimulants, and alcohol have been reported to produce neonatal withdrawal symptomatology *(Lowinson, et al, 2005)*.

  Possible neonatal effects of prenatal exposure to a variety of drugs are listed in *Appendix C*.

- Not all babies exposed to drugs and alcohol experience withdrawal symptoms. It has been estimated that 50 to 60 percent of substance-exposed babies require medication to treat withdrawal symptoms *(Weiner & Finnegan, 2006)*. However, when babies roomed-in with their mothers at BC Women's Hospital, only 25 percent of the heroin- or methadone-exposed babies required treatment with morphine, compared to 55 and 53 percent of babies in the two comparison groups who did not room-in *(Abrahams, Kelly, Payne, Thiessen, Mackintosh, and Janssen, 2007)*.

- If withdrawal symptoms are present, onset, severity, and duration are variable depending on drug use history, excretion of the drug, and the health of the mother and baby. Generally, the closer to the time of birth a mother used a drug, the more severe the withdrawal symptoms and the greater the delay in onset in the newborn period *(Weiner and Finnegan, 2006)*. If more than seven days have elapsed between last maternal use and delivery, the incidence of withdrawal is extremely low *(Schultz, et al, 2003)*. The onset of narcotic withdrawal is frequently 48 to 72 hours, but may be delayed for up to nine days *(BCRCP, 1999)*. When neonates cannot be followed in hospital for more than three to four days after delivery, it is essential that the mother/caregiver be taught how to recognize withdrawal symptoms.

- Psychometric comparison studies (testing reliability and validity) of neonatal withdrawal scoring tools were not found in a review of the literature. The Neonatal Abstinence Scoring System [NASS] *(Finnegan, Connaughton, Kron, and Emich, 1975)* is currently the tool most frequently used in Fraser Health to guide pharmacological treatment of withdrawal for opioid-exposed babies and it is recommended in the ACoRN manual *(ACoRN: Acute Care of At-risk Newborns Editorial Board, 2005)*. The NASS was developed more than 30 years ago when substance-exposed babies were cared for in an environment of reduced stimulation, separated from their mothers. At that time, the scoring system was validated in a sample of 121 term infants showing physical withdrawal symptoms and it had a good interrater reliability coefficient (0.82) among trained nurses. The NASS consists of 31 weighted items with cut-off scores indicating the need for pharmacological treatment *(Appendix C)*. Scoring of items on the NASS is based on a four hour observation interval.

- The American Academy of Pediatrics (1998) recommended the use of a scoring method to measure the severity of withdrawal to guide adjustments in pharmacologic treatment; however, the authors noted that the Finnegan NASS is complex for use in a busy hospital unit. Although the various scoring tools provide a useful list of symptoms that warrant close observation, the validity of these instruments has not been established *(Osborn, Jeffery, and Cole, 2005)*. Therefore, when considering initiation of pharmacological treatment for withdrawal, NASS items that are susceptible to observer bias must be evaluated in the context of the entire clinical picture.

- Indications for initiating pharmacological treatment of withdrawal and clinical management recommendations can be found in the BCRCP Guidelines (1999).

- The fundamentals of care for all babies experiencing drug withdrawal symptoms includes supportive comfort measures such as:
    - holding/settling;
    - swaddling;
    - massage;
    - relaxation baths;
    - pacifiers

  (see Special Delivery: A Simple Guide for Parenting Substance-Exposed Babies)

Baby Care Teaching

- **Teach the mother and/or caregiver how to assess and document withdrawal symptoms**. Withdrawal symptoms are reported to be less when a mother is on methadone and breastfeeding; however, delayed withdrawal is more common with methadone. *(Philipp, Merewood, and O'Brien, 2003; AAP, 1998)*

- Participation of parent(s) and alternate caregiver(s) in infant care as early as possible is likely to increase confidence in handling the infant and readiness to assume full responsibility for the infant's care at home.

- "Special Delivery: A Simple Guide for Parenting Substance-Exposed Babies" *(Fraser Health, 2008)*, can be used by health care providers to focus on specific points that will meet the learning needs of the parent(s)/caregiver(s).

- Complete the Parent and Caregiver Teaching Tool for Infants Exposed to Substances *(Appendix F)* while the infant remains in hospital. Regardless of whether or not the infant has been removed, it is recommended that the parent(s) are encouraged to learn and practice caring for the infant *(Burry and Wright, 2006; Weaver, 2007)*.

Infant Feeding

- Breastfeeding provides optimal infant nutrition; however, in the context of substance use many other considerations are involved. A decision to breastfeed should be individualized after informed discussion between the mother and the heath care provider(s) *(AAP, 2001)*.

- Evaluation of current substance use regarding amount and frequency of use is essential in making the decision that may prevent a mother from breastfeeding. A past history of substance use is not reason to delay or prevent initiation/sustaining breastfeeding.

- **Nicotine** transfers into the breastmilk. It alters the taste and smell of the breastmilk. Nicotine can cause symptoms of irritability, tremor, and sleep disturbances with newborns of heavy smokers during pregnancy, and withdrawal syndrome can occur early, within 12 to 24 hours of life *(Pichini, Garcia-Algar, and Oscar, 2006)*. Women who smoke should not be deterred from breastfeeding, but given information and support to reduce or eliminate smoking. Nicotine replacement therapy is considered a safer and better choice than cigarettes because it avoids the impurities found in cigarettes *(Hale, 2006)*. Second hand smoke is related to sudden infant death syndrome and other health concerns *(AADAC, 2004a)*.

- The American Academy of Pediatrics (1998) has stated that a woman may choose to breastfeed regardless of the amount of her **Methadone** dose. The woman should be stabilized on Methadone and not using other substances *(AADAC, 2004e)*. Recently, outcomes of 11 infants of lactating methadone-maintained women were compared to a matched sample of formula-fed infants of methadone-maintained mothers *(Jansson, Choo, Velez, Harrow, Schroeder, Shakleya, and Huestis, 2008)*. Results demonstrated low concentrations of methadone in the breast milk (21 to 462 ng/mL) and the concentrations were not related to maternal methadone dose. There were low concentrations of methadone (2.2 to 8.1 ng/mL) in all plasma samples of breastfed infants and these concentrations were also unrelated to maternal dose (50 to 105 mg). There were no significant effects of breastfeeding on neurobehavioural outcomes.

- The Canadian Pediatric Society recommends that mothers who consume **alcoholic** beverages infrequently should breastfeed their children. However, breastfeeding is not recommended for women who regularly consume more than two drinks a day *(AADAC, 2004b)*.

- The following substances are **not recommended** for breastfeeding:

    - **Amphetamines**: The Canadian Pediatric Society and the American Academy of Pediatrics do not recommend breastfeeding while using Amphetamines. Amphetamines transfer into the breast milk and may cause irritability and poor sleep patterns in the infant *(AADAC, 2004b)*.

    - **Marijuana/Cannabis**: Tetrahydrocannabinol (THC) is transferred into breast milk. Decreased motor development in the nursing infant is suspected *(AADAC, 2004c)*.

    - **Cocaine**: A mother who continues to use cocaine should not breastfeed her child. Cocaine can remain in breast milk for more than 48 hours after last use. Infant seizures and extreme irritability may result from consuming cocaine through the breast milk *(AADAC, 2004d)*.

- Examination of relevant studies indicates that there is no evidence that breastfeeding poses any additional risk to infants of **hepatitis B** virus (HBV) carrier mothers *(BCCDC, 2005)*. Hepatitis B surface antigen has been detected in some samples of breast milk; however, there is no evidence that breastfeeding increases the risk of mother to child transmission *(Hill, 2002, Riordan, 2005)*.

- Maternal **hepatitis C** virus (HCV) is not a contraindication to breastfeeding *(BCRCP, 2003; Tajiri, H., et al, 2001)*. Breastfeeding is safe, except in the presence of blood staining from breaks in the nipple tissue *(NCID/CDC, 2001)*. Studies have shown no increase in HCV infection among infants born to HCV-infected mothers who breastfeed compared to infants born to HCV-infected mothers who bottle feed *(Riordan, 2005; BCCDC, 2005; Tajiri, 2001)*.

- Breastfeeding is contraindicated for **human immunodeficiency virus** (HIV) positive women *(ILCA, 2005)*. If HIV status is unknown, encourage the mother to pump her milk and freeze it until her HIV status is confirmed as negative.

- If a mother and baby are separated and the mother would like to breast feed, encourage her to express her breasts to stimulate milk production and to provide her baby with her breast milk. Mothers who choose to provide breast milk will need resources to help them accomplish this *(Appendix G, Pumping, Storing, and Transporting Breast Milk).*

- Many women who use substances have experienced violence and/or abuse. "Breastfeeding may not be the best choice for some survivors" of sexual abuse and women "need to be respected and helped to find more suitable feeding methods" if concerns arise *(Simpkin and Klaus, 2004, p. 99)*.

Newborn Laboratory Tests

- It is not necessary to collect a urine drug screen from the baby if the mother has consented and provided a maternal urine sample.

- Laboratory studies may be ordered by a physician with **informed consent** from the mother if deemed medically necessary for the baby. However, if the mother cannot or will not give consent, these tests can be ordered by the newborn's physician without parental consent, and the specimen is obtained by a nurse. In all cases the mother must be informed *(Code of Ethics: BRSW, 2006; CNA, 2008; CMA, 2004)*.

- If the infant has been removed, the MCFD social worker or delegated aboriginal agency worker can provide consent to the physician for lab work. The tests should be done prior to discharge and laboratory reports sent to the medical practitioner who is providing follow-up care in the community.

- Testing for longitudinal exposure to substances in meconium or hair is discouraged in Fraser Health. An ethical analysis of the principles and values involved in newborn meconium testing was facilitated by the Fraser Health Ethics Service in spring 2007 *(Appendix H provides a summary of the report)*. Further reading regarding the legal and ethical considerations in neonatal testing for substance exposure is encouraged *(Marcellus, 2007a; Zadunayski, Hicks, Gibbard, and Godlovitch, 2006)*.

Immunizations *(BCCDC, 2007)*

If hepatitis serology is positive or unknown, it is recommended that the infant receive:

- Initial Hepatitis B vaccine; and
- Hepatitis B Immune Globulin (post-exposure prophylaxis).

The second Hepatitis vaccine is due at one month of age. See the BCCDC website for appropriate schedule of ongoing immunizations (www.bccdc.org).

Length of Stay

- Substance-exposed infants will present with a broad spectrum of possible effects, ranging from healthy term newborns with no apparent effects to high-risk newborns with significant effects.

- Extended maternal/infant length of stay may be required to provide time to meet medical, social, teaching, or environmental needs.

- Infant discharge is determined by the physician in accordance with criteria for infant and family readiness for discharge.

COMPONENTS OF THE DISCHARGE PLAN

Recommended roles and responsibilities for members of the interdisciplinary team in relation to discharge planning are outlined in *Appendix I*.

Readiness of the Infant *(BCRCP, 1999)*

Physiological Status

- The infant is physiologically stable and showing neurobehaviour that is consistent with what is expected in the newborn period.

Infant Behaviour

- The infant can be consoled with measures that match the ability of the parent/caregiver.

- The infant can tolerate an environment that can be duplicated in the home.

- The newborn has not required morphine for five days.

Infant Feeding

- The infant is tolerating oral feeds (breast and/or bottle) and gaining weight satisfactorily as evidenced by a trend of weight gain over three to five days.

Readiness of the Mother/Parent

The mother/parent is ready for the baby to be discharged to her/him when:

- The mother/parent has:
  - the necessary supplies (diapers, clothing, bedding, feeding accessories) for newborn care;
  - participated in baby care and the Parent and Caregiver Teaching Tool *(Appendix F)* has been completed; and
  - received the booklet "Special Delivery".

- There is a documented post-discharge plan regarding community follow-up and resources for the mother/parent *(Appendix J: Discharge Form; and Appendix K: Safety Plan)*.

- The MCFD social worker/delegated aboriginal agency worker has assessed readiness of the mother/parent for discharge of the infant and completed an Immediate Safety Assessment (ISA). The ISA form is located in *The Risk Assessment Model for Child Protection in British Columbia (MCFD, 1996).*

- Infant CPR training is recommended (local continuing education programs available).

Readiness of the Alternate Caregiver/Foster Parent

- The alternate caregiver is the person to whom the baby will be discharged in agreement between the mother/parent and MCFD or delegated aboriginal agency.

- The foster parent is the person who meets the requirements of MCFD/delegated aboriginal agency in the areas of training, support, and home assessment.

The alternate caregiver/foster parent is ready for the baby to be discharge to her/him when:

- The alternate caregiver/foster parent has:
  - the necessary supplies (diapers, clothing, bedding, feeding accessories) for newborn care;
  - received teaching about the infant's needs; and
  - received the booklet, "Special Delivery".

- If the newborn is being discharged to an alternate caregiver by agreement, the MCFD social worker/delegated aboriginal agency worker has conducted an Immediate Safety Assessment, including overall readiness of the alternate caregiver for discharge of the infant.

- There is a documented post-discharge plan regarding community follow-up *(Appendix J: Discharge Form)*. This will include a description of parameters of contact/involvement of mother/parent in infant care.

- Infant CPR training is recommended.

Discharge Planning Meeting

- Effective discharge planning is essential and often complicated. The hospital social worker will coordinate **at least one** interdisciplinary meeting prior to discharge from hospital to:

    - establish/review the discharge plan; and
    - identify outstanding needs for the mother/caregiver and infant.

- Family/alternate caregivers appreciate a discharge planning meeting held at least one day prior to the planned discharge to prepare the home setting and to arrange community resources.

- Discharge on weekends (Friday to Sunday) and holidays is discouraged due to lack of available community resources during these times.

Participants at the Discharge Planning Meeting

Key Participants Include:

- mother/parent(s)
- support person as identified by mother/parent
- alternate caregivers or foster parents
- hospital pediatrician
- hospital social worker
- MCFD/delegated aboriginal agency protection social worker
- RN from Neonatal Intensive Care Unit (NICU)/Pediatric or Maternity Units
- public health/hospital liaison nurse

Other Participants may include, according to availability and involvement:

- NICU physiotherapist/occupational therapist
- general practitioner who will be providing follow-up in the community
- Maxxine Wright Community Health Centre representative
- pediatrician who will be providing follow-up care in the community
- addictions specialist/addictions counselor/mental health worker
- midwife
- MCFD/delegated aboriginal agency resource social worker

Issues To Be Discussed at the Discharge Planning Meeting

- Review of infant's health history (i.e. prenatal history, communicable disease status, and medical health care needs)
- current health issues/risks for the infant related to substance-exposure, and care strategies that work for baby (formula, skin care, therapeutic handling)
- identification of physician in the community for follow-up with the infant
- identification of specific follow-up needs and appointments for infant
- consents for release of information regarding reports
- identification of mother's/parent's concerns and needs (practical and emotional) and review of plan for post-discharge resources and support
- confirmation regarding readiness of the receiving home
- if the infant is discharged to foster care, plan for mother/parent visitation

- confirmation of presence of infant's parent(s)/caregiver(s) and MCFD social worker/delegated aboriginal agency worker at discharge
- designation of a case manager, and date and place of follow-up meetings

Documentation of the Discharge Planning Meeting

- Hospital social worker will be responsible for documenting meeting proceedings in the patient hospital chart.

- Hospital social worker will arrange for Discharge Form *(Appendix J)* to be completed at the meeting, and for copies to be distributed as indicated.

- The Discharge Form and a summary of the meeting will be provided to the mother (and the caregiver if the infant has been removed) including:

  - instructions for special infant care if applicable;
  - contact names and numbers for resources planned/arranged; and
  - recommended follow-up schedule (arrangements for initial appointments should be made prior to discharge).

Interagency Referral Process at Discharge

- The NICU/pediatric/maternity/liaison nurse will complete the public health referral and fax the referral to the appropriate health unit on the day of discharge along with the completed Parent(s)/Caregiver(s) Teaching Record *(Appendix F)* and Discharge Form *(Appendix J)*.

- The hospital health records department will forward a copy of the medical discharge summary to the mother's/baby's physician.

- If the baby is in the care of the Director of Child Welfare, MCFD/delegated aboriginal agency will provide to the foster parent(s):

  - Consent for release of information;
  - Consent to Routine Medical Care *(Appendix L)*; and
  - Child's Permanent Medical Record *(Appendix M)*.

- Referral to the Infant Development Program [IDP] *(Appendix N)* will be made by the pediatric/maternity nurse or NICU physiotherapist/occupational therapist.

- MCFD/delegated aboriginal agency utilizes an integrated case management approach to working with families at risk; therefore, continued involvement of participants in the discharge meeting may be requested post-discharge.

Community Follow-up Recommendations

For Birth Families/Alternate Caregiver(s):

- Appointment for the infant with primary medical provider within 48 to 72 hours after discharge from hospital *(BCRCP,1999).*

- Public health nurse follow up based on Best Beginnings Postnatal Guidelines:
  - telephone call from the public health nurse within 24 hours of discharge; and
  - a home visit within 72 hours of discharge.

- MCFD protection social worker/delegated aboriginal agency worker will continue follow up as appropriate.

For Foster Families:

- As for birth families with the addition of:
  - telephone call from MCFD resource worker/delegated aboriginal agency worker within 24 to 48 hours of discharge.

Intensity of Follow-Up

The following guidelines are recommended for the infant's first year of life:

- For infants in foster care: home visits by a MCFD protection social worker as soon as possible following placement and at least every 90 days thereafter *(MCFD Child in Care Standard 9: Developing and Maintaining a Meaningful Relationship with a Child in Care)*.

- For infants in foster care with a delegated aboriginal agency: home visits on the day of placement, seven days after placement, and at least every 30 days thereafter *(Aboriginal Operational and Practice Standards and Indicators #8)*.

- For foster parents: a monitoring plan by the MCFD resource worker includes frequent contact by telephone or email and in person at least every 90 days *(MCFD Caregiver Support Service Standards 17: Ongoing Monitoring and Annual Reviews)*.

- Frequency and purpose of visits from the public health nurse will vary according to the needs of the family and indicators from previous visits.

- Medical follow up by the pediatrician or family physician as needed.

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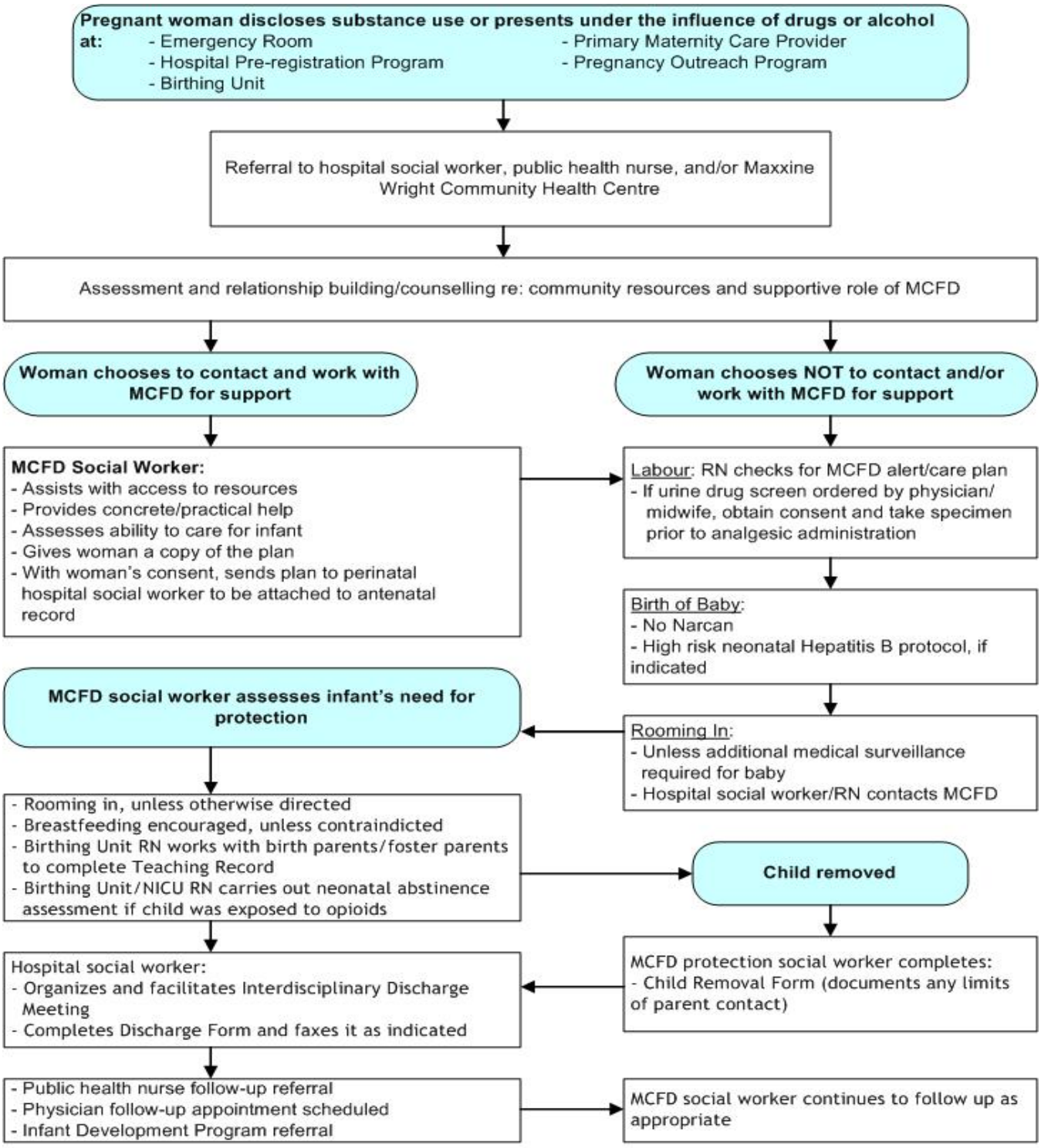
APPENDIX A: Flow Chart for Women with Perinatal Substance Use Concerns and Their Children



February 2008

APPENDIX B: Child Removal Form

This is to certify that _____ *(name of child)*, born on _____ *(date of birth)*, was removed under the *Child Family and Community Service Act* and is now in the care of the Director, Child Family and Community Services. Signing authority, which indicates a change in the individual responsible for the child, is now the responsibility of the Director.

Visitation is limited to the following individuals and is to take place on the unit. All visitors must have prior approval of the Director's delegate. **Supervision (if required) must be adhered to as outlined below and must be arranged by the Director's Delegate.**

Are visitors allowed? ☐ YES ☐ NO	If YES, please specify whom Name: _____ Relationship: _____
Are visits to be supervised? ☐ YES ☐ NO	If YES, please specify by whom Name: _____ Relationship: _____ *(Family Member or Agency)* Additional Instructions:
May information about the child be released? ☐ YES ☐ NO	If YES, please specify to whom? Name: _____ Relationship: _____

Other Expectations from the Director: _____

Approved By: _____ Date: _____
(Signature of Director's Delegate)

APPENDIX B: Child Removal Form

This child may not be released from hospital without prior authorization from the Director's Delegate. The following plans have been made with regards to discharge:

Child will be discharged to delegate of the ☐ Director ☐ Foster Parent

_____	OR	_____
(Name of Director's Delegate)		*(Name of Foster Parent Once Known)*
_____		_____
(Phone Number)		*(Phone Number)*

NOTE: Attach documentation of faxed discharge authorization[1]

At discharge, the following information **MUST** be completed. **Picture identification must be produced by the delegate and/or the foster parent.**

_____ *(name of child)*,

was discharged on _____ *(date)*

to the care of _____
(Name of Person Who Child Was Discharged To)

_____
Signature of Foster Parent/Director's Delegate

_____	_____
Date	**Witness (RN or Social Worker)**

Any concerns should be directed to the Director's Delegate

Name of Assigned Social Worker: _____

Phone Number: _____

After-hours Number: _____

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[1] Documentation of approved discharge must include a statement on Child Welfare Agency letterhead identifying which Director's Delegate is releasing the child, which on the unit care provider (name and title) they spoke to authorizing the release, the name, address and phone number of the foster parent accepting the child, and the child's full name and date of birth. The fax must be signed and dated.

APPENDIX C: Neonatal Abstinence Scoring System

(Adapted from Finnegan LP, Kaltenbach K: The assessment and management of neonatal abstinence syndrome. In Hoekelman, Nelson N, eds: Primary Pediatric Care, ed 3, St Louis, 1992, Mosby)

Gestational Age at Birth: _____ Birth Weight: _____

	SIGNS AND SYMPTOMS		INTERVAL OF OBSERVATION								Comments (Date/Time)
		Age									
		Date									
		Time									
		SCORE									
CENTRAL NERVOUS SYSTEM DISTURBANCES	Excessive high pitched (or other) cry	2									
	Continuous high pitched (or other) cry	3									
	Sleeps <1 hour after feeding	3									
	Sleeps <2 hours after feeding	2									
	Sleeps <3 hours after feeding	1									
	Hyperactive moro reflex	2									
	Markedly hyperactive moro reflex	3									
	Mild tremors when disturbed	1									
	Moderate-severe tremors when disturbed	2									
	Mild tremors when undisturbed	3									
	Moderate-severe tremors when undisturbed	4									
	Increased muscle tone	2									
	Excoriation (specify area)	1									
	Myoclonic jerks	3									
	Generalized convulsions	5									
METABOLIC/VASOMOTOR/RESPIRATORY DISTURBANCES	Sweating	1									
	Fever 37.2 – 36.2 ^{o}C	1									
	Fever >38.4 ^{o}C	2									
	Frequent yawning (>3-4 times/interval)	1									
	Mottling	1									
	Nasal stuffiness	1									
	Sneezing (>3-4 times/interval)	1									
	Nasal flaring	2									
	Respiratory >60/min	1									
	Respiratory rate >60/min with retractions	2									
GASTRO-INTESTINAL DISTURBANCES	Excessive sucking	1									
	Poor feeding	2									
	Regurgitation	2									
	Projectile vomiting	3									
	Loose stools	2									
	Watery stools	3									
	Weight										
	Pediatric Morphine: Dosage										
	TOTAL SCORE										
	INITIALS OF SCORER										

DEFINITIONS

This section defines all of the clinical signs and symptoms that are used in the Neonatal Abstinence Scoring System tool. The definitions will enhance your understanding of the scoring items and, hopefully, your ability to use the abstinence scoring tool. In addition, techniques used in examining infants for withdrawal are described. It is recommended that you have a copy of the scoring tool at hand as you proceed through this section to help you gain familiarity with each assessment item.

NOTE: *The examination period encompasses the period of time from the last exam to the time of the current exam. For example, if an infant is scored every three hours, the exam period would encompass a three-hour period of time.*

CRYING

It is not uncommon for healthy full-term infants to occasionally cry, especially when they are hungry, wet, or experiencing minor discomfort. In general, during periods of crying, the normal infant will use self-consoling measures, such as finger-sucking or fist-sucking to diminish or eliminate crying within a 15-second period of time. If the infant is unable to adequately use self-consoling measures, interventions from the caregiver, such as holding, rocking, or offering a pacifier are required. These measures will usually assist in comforting the infant unless they are extremely hungry, in pain, or experiencing major discomfort due to a pathological condition *(Brazelton, 1984)*.

Crying: Excessive High-pitched

SCORE

2	

if applicable

Excessive high-pitched crying should be scored when the infant is unable to decrease crying within a 15-second period using self-consoling measures. This item should also be scored if the infant continues to cry intermittently or continuously for *up to* five minutes despite caregiver interventions during the examination period. If these signs are present, this item (excessive high-pitched cry) should be scored whether or not the infant's cry is high-pitched *(Finnegan, 1991)*.

Since an infant's cry may vary in pitch, this item should not be scored if high-pitched crying is not accompanied by the other clinical signs described above.

Crying: Continuous High-pitched

SCORE

3	

if applicable

This item should be scored if the infant is unable to use self-consoling measures to decrease crying within a 15-second period. This item should also be scored if the infant continues to cry intermittently or continuously for *greater* than five minutes despite caregiver interventions during the examination period. Again, if these signs are present, this item (continuous high-pitched cry) should be scored whether or not the infant's cry is high-pitched *(Finnegan, 1991).*

SLEEP ITEMS *(< 1 hour - Score 3) (< 2 hour - Score 2) (< 3 hours - Score 1)*

SCORE

1	
2	
3	

select one, if applicable

Score one of these items based on the longest period of sleep displayed by the infant within the entire scoring interval. This item should be scored whether the baby is exhibiting light or deep sleep.

In deep sleep, the baby will exhibit regular breathing, eyes closed, no spontaneous activity except for startles or jerky movements at regular intervals, and no eye movements *(Brazelton, 1984)*.

In light sleep, the baby will exhibit irregular respirations, eyes closed, some sucking movements, occasional random body movements and startles, eye movements under closed eye lids, and brief opening of the eyes at intervals *(Brazelton, 1984)*.

Example: In a three-hour period (1200 to 1500), after being fed, the baby falls asleep at 1230, wakes up at 1315, and goes back to sleep at 1330. At 1435, the baby awakens again and remains awake until the infant is scored at 1500 hours.

Evaluation: In the example three-hour period, the infant slept for periods of 45 minutes (1230 to 1315) and 65 minutes (1330 to 1435). Since 65 minutes was the longest sleep cycle, the baby would be scored: Sleeps < 2 hours.

***NOTE**: If a three-hour scoring period is used due to a three-hour feeding or medication administration schedule, the item Sleeps < 3 hours should not be scored, unless the infant wakes up on his or her own after being asleep for at least two hours before the next scoring interval begins.*

MORO REFLEX

The Moro reflex is a normal newborn reflex that evaluates the integrity of the infant's central nervous system. It can be elicited in several ways *(Korones, 1981; Brazelton, 1984; Whaley & Wong, 1989)*.

1. Lift the infant slightly off the crib by the wrists or arms and allow the infant to fall back onto the mattress.

2. Hold the infant in a supine position with both hands, one palm beneath the sacrum and buttocks and the other beneath the occiput and upper back. Then, suddenly slip your hand down from the occiput onto the back (fingers supporting the neck), allowing the head to fall backward about 30 degrees.

When the reflex occurs, the infant's arms will straighten and the elbows will move away from the body. Extension of the wrists and fanning (opening) of the fingers will occur. When the fingers are extended, the infant's index finger and thumb will form a "C" shape. This is followed by return of the arms to the chest in a position of passive flexion. The arms may begin to cross over each other. Extension and flexion of the infant's hips and knees may also occur. A cry may additionally accompany the Moro reflex.

General, slight jitteriness of the hands may occur when a Moro reflex is initiated in normal infants. In a study by *Parker, et al, 1990,* jitteriness was present with the elicitation of a Moro reflex in 6% of healthy full-term infants (N=936). The jitteriness occurred in those infants who were crying or irritable.

Hyperactive Moro Reflex

SCORE

2	

if applicable

Hyperactive Moro reflex should be scored if the infant exhibits pronounced jitteriness of the hands during or at the end of a Moro reflex. Jitteriness is defined as rhythmic tremors that are symmetrical and involuntary. Prior to eliciting the Moro reflex, the infant should be quieted if irritability or crying is present. This will ensure that the jitteriness, if present, is due to withdrawal rather than agitation *(Finnegan, 1991)*.

Markedly Hyperactive Moro Reflex

SCORE

3	

if applicable

This item should be scored if jitteriness *and* clonus of the hands and/or arms are present during or after the initiation of the reflex.

Clonus is defined as repetitive jerks (out-in movements or beats) of the wrist or ankle that are involuntary *(Korones, 1981; Daze & Scanlon, 1985)*.

If you are unsure whether or not clonus was present during the elicitation of a Moro reflex, the presence of hand clonus can be tested directly. This is done by dorsiflexing (movement of hand backwards at the wrist) the infant's hand abruptly backwards, using a short brisk movement. To further clarify the presence of clonus, the infant's feet can also be examined. Clonus of the foot can also be tested using dorsiflexion. This is accomplished by placing two fingers against the anterior sole of the infant's foot and abruptly, with a short brisk movement, move the foot backwards at the ankle. Sometimes ankle clonus is difficult to elicit using the dorsiflexion method. An alternative technique is to hold the anterior third of the foot with the infant's hip and knee flexed. Then shake the foot gently while slowly extending and releasing the foot *(Korones, 1981; Fenichel, 1990)*.

If hand or foot clonus is present, the response will consist of several repetitive jerks of the hand or foot. A few beats of clonus may be present normally, but sustained clonus is abnormal. If more than 8 to 10 jerks or beats occur, the baby is probably in a hyperactive or irritable state *(Korones, 1981; Fenichel, 1990)*.

TREMORS: DISTURBED

Tremors and jitteriness are synonymous terms. They are defined as involuntary movements or quivers that are rhythmical with equal amplitude or strength which occur at a fixed point; for example, quivers of the hand when the wrist is stationary *(Parker, et al, 1990)*.

If the infant is asleep, a few jerking movements of the extremities may be present. These should not be scored since it is not unusual for infants to have startle or jerking movements, particularly of the legs, while asleep *(Brazelton, 1984)*.

***NOTE**: Tremors may be induced by stimuli, particularly sound, touch, or passive movement of a joint (McBride, 1984).*

Mild Tremors: Disturbed

SCORE
1	
if applicable

This item should be scored if the infant exhibits observable tremors of the hands or feet when the infant is asleep, drowsy, awake, active, or alert - while being handled (disturbed) *(Brazelton, 1984; Parker, et al, 1990)*.

Moderate-Severe Tremors: Disturbed

SCORE
2	
if applicable

This item should be scored if the infant exhibits observable tremors of the arms (one or both) or legs (one or both), with or without observable tremors of the hands or feet, when the infant is asleep, drowsy, awake, active, or alert - while being handled (disturbed).

TREMORS: UNDISTURBED

Mild Tremors: Undisturbed

SCORE
3	
if applicable

This item should be scored if the infant exhibits observable tremors of the hands or feet when the infant is asleep, drowsy, awake, active, or alert, but not being handled by a caregiver (undisturbed).

When observing for undisturbed tremors, be sure to provide the infant with at least two one-minute undisturbed periods during the exam. This can be done by observing the infant's behaviour for a minute or so prior to temperature-taking, as well as before diaper-changing. Since each exam should be individualized based on the needs of the baby, you can determine the best time to observe for undisturbed tremors.

Moderate-Severe Tremors: Undisturbed

SCORE

4	

if applicable

This item should be scored if the infant exhibits observable tremors of the arms (one or both) or legs (one or both), with or without observable tremors of the hands or feet, when the infant is asleep, wake, drowsy, active, or alert, but not being handled by a caregiver (undisturbed).

INCREASED MUSCLE TONE

SCORE

2	

if applicable

Tone is the ability of a muscle to resist movement. Tone is also referred to as the recoil phenomenon. This means that when a muscle is stretched passively and released, it should spring back to its original position *(Eng, 1987)*.

The best time to examine the infant's muscle tone is when the infant is quiet, alert, or awake and moving. Tone should not be assessed when the infant is asleep or crying *(Daze & Scanlon, 1985; Finnegan, 1991)*. Therefore, it is necessary to wake the infant or comfort the infant if he or she is crying, prior to examining the infant's muscle tone.

To awaken the infant, gently speak to or stroke the infant. Holding the infant upright, offering a pacifier, or gentle rocking may help to quiet a crying infant.

Muscle tone can be assessed in a variety of ways *(Daze & Scanlon, 1985; Brann & Schwartz, 1983; Whaley & Wong, 1989)*. It may be necessary to use more than one of the following examination techniques to adequately assess the infant's muscle tone.

1. **Pull-to-sit:** When the infant is lying supine, grasp the hands and pull the infant upright to a sitting position. The normal term infant will attempt to bring his or her head up in line with the body. However, some head lag is present. If the infant is able to briefly hold the head up, it will fall forward onto the chest when the sitting position is reached.

   Increased tone should be scored if the infant does not experience any head lag when being pulled to the sitting position, with total body rigidity (like a board).

2. **Upright suspension:** Hold the infant upright in front of you with your hands on the infant's chest just under the arms. While suspended, look to see if the infant can hold his or her head in line with the rest of the body for two to three seconds with a straight back and slightly extended hips, with legs slightly flexed.

   When using this method, increased tone should be scored if the infant remains rigid (like a board with continued flexion of legs). In normal infants, some head lag will be present when holding the baby upright.

3. **Flexion and extension:** While the infant is lying supine, passively extend and release the infant's arms and legs to observe for recoil. In the normal term infant, some resistance to extension should be present, but slight extension is possible and recoil of the extremity will occur spontaneously.

   Increased tone should be scored if there is tight flexion of the infant's arms and legs (unable to slightly extend the arms or legs) when using the flexion and extension method.

4. **Ventral suspension:** Hold the infant face down (prone), above and parallel to the bed, with your hands supporting the infant's chest and abdomen. In this position, the normal full-term newborn will attempt to bring his or her head in a straight line with their back and demonstrate slight flexion of the hip and knee.

   Increased tone should be scored if the infant exhibits hyper-extension of the head and prolonged flexion of the legs and hip when using the ventral suspension method.

***NOTE**: When the infant is left undisturbed, frequent extension of the arms (occurring more than twice and last more than 15 seconds) may be present. This would indicate increased tone of the upper extremities. When frequent extension of the arms during undisturbed periods is present, it is important to use one of the techniques mentioned to determine the presence of increased body tone.*

EXCORIATION

SCORE
1	
if applicable

Excoriation may be the result of constant rubbing of an extremity against a flat surface that is covered with fabric, such as bed linen.

This item should be scored if excoriation is present on the chin, knees, cheeks, elbows, toes or nose *(Chasnoff, 1988)*. A reddened diaper area should not be scored as excoriation if it is the result of loose or watery stool, which will be scored separately.

***NOTE**: Be alert to the potential for mistakenly scoring excoriation when the actual symptom is loose or watery stool.*

MYOCLONIC JERKS

SCORE
3	
if applicable

Myoclonic Jerks are involuntary spasms or twitching of a muscle. These are rarely seen in the newborn period. In infants, these can be seen as a jerking (a quick motion of short duration) movements of the muscles of the face or extremities. When more pronounced, they resemble myoclonic seizures, which appear as single or multiple jerks of the arms or legs *(Daze & Scanlon, 1985)*.

This item should be scored if the infant expresses twitching movements of the muscles of the face or extremities, or if jerking movements of the arms or legs are observed. These jerking movements are different from tremors. Jerking movements are associated with short quick contractions of muscles or extremities, and tremors are described as jitteriness or the quivering of extremities.

***NOTE**: Myoclonic jerks may be inducted by stimulation, particularly sound, touch, or passive movements of an extremity (McBride, 1984).*

CONVULSIONS

A higher incidence of convulsions or seizures has been reported in infant's exposed in utero to methadone than to other opiates *(Kaltenbach and Finnegan, 1986; Wilson, 1975)*. In studies that examined the incidence of drug-related seizures, all infants manifested other withdrawal symptoms before seizures were observed. In general, seizures occurred when the infants were 10 days of age. The principal seizure manifestations found in methadone-exposed infants included generalized motor seizures or rhythmic myoclonic jerks *(Herzlinger, Kandall & Vaughan, 1977; Goddard & Wilson, 1978; Jeremy & Hans, 1985)*.

Generalized Convulsions

SCORE
5	
if applicable

Generalized convulsions or seizures are commonly referred to as tonic seizures. Tonic seizures consist of generalized activity involving tonic extensions of all limbs, but are sometimes limited to one extremity or manifested by tonic flexion of all limbs. Generalized convulsions are often accompanied by apnea and a few clonic (alternate contraction and relaxation of a muscle) movements *(Blackburn, 1993; Daze & Scanlon, 1985)*.

This item should be scored if generalized seizure activity is present. If generalized jitteriness of the extremities are observed, touch or flex the involved limbs. If the jitteriness stops during these maneuvers, it is not due to a seizure. If it cannot be stopped by touching or flexing, the jitteriness is the result of a seizure *(Daze & Scanlon, 1985)*.

It is important to observe also for subtle seizure activity. These subtle signs may include eye staring, rapid involuntary movements of the eyes, chewing, rowing motions of the upper extremities, or bicycling motions of the legs, back arching, and fist clenching *(Korones, 1981)*.

Subtle seizures are not common signs of withdrawal in opiate-exposed infants *(Finnegan & Kaltenbach, 1992)*. However, if subtle seizures are present, they should be scored using the generalized convulsions category.

SWEATING

SCORE

1	

if applicable

Score this item if wetness is felt on the infant's forehead, upper lip, or back of the neck *(Blackburn & Loper, 1992; Finnegan & Kaltenbach, 1992)*. Do not score if sweating is due to overheating as a result of nursing measures such as swaddling.

FEVER *(Fever ≤ 101[37.2 to 38.3°C] - Score 1) or (Fever > 101 [38.4°C] - Score 2)*

SCORE

1	
2	

select one, if applicable

This item should be scored, using the appropriate descriptor in the scoring tool, if the infant's axillary temperature is 37.2°C or higher. To obtain an axillary temperature, keep the glass thermometer under the infant's arm for a period of three minutes *(Roberts, 1977)*. This time frame has also been recommended by the American Academy of Pediatrics *(Stephen & Sexton, 1987)*.

***NOTE**: It might be important to keep the infant dressed consistently. Fluctuations in temperature may occur if the infant is dressed in different types of clothing; that is, sometimes dressed in a shirt and diaper and other times dressed in a sleeper. If the infant has an increased temperature when dressed in a sleeper, it might be more appropriate to replace the sleeper with a shirt, rather than leaving the infant unswaddled. It is recommended that all infants experiencing withdrawal remain swaddled in a blanket during times when caregiving is not being administered (Lauridsen-Hoegh, 1991; Torrence & Horns, 1989).*

FREQUENT YAWNING

SCORE

1	

if applicable

This item should be scored if the infant yawns more than three times within the testing period.

MOTTLING

SCORE

1	

if applicable

Mottling is a discoloration of the skin. It generally resembles a marbled appearance of pink and pale or white areas. Mottling is typically seen on the infant's chest, trunk, arms, or legs. This item should be scored if mottling is present on the infant's chest, trunk, arms, or legs.

NASAL STUFFINESS

SCORE

1	

if applicable

Nasal Stuffiness occurs when the nares are partially blocked due to the presence of exudate, which makes respirations noisy. A runny nose may also be present. This item should be scored if the infant exhibits noisy respirations due to the presence of nasal exudate that may or may not be associated with a runny nose.

SNEEZING

SCORE

1	

if applicable

This item should be scored if the infant sneezes more than three times within the scoring interval. Sneezing may occur as individual episodes or may occur serially.

NASAL FLARING

SCORE

2	

if applicable

Nasal flaring is associated with an outward spreading of the nostrils during breathing. It is generally present during inspiration to allow more air to enter the lungs *(Whaley & Wong, 1989)*. This item should be scored if nasal flaring is present at any time during the testing interval.

RESPIRATORY RATE *(> 60/min. - Score 1) or (> 60/min. with retractions - Score 2)*

SCORE

1	
2	

select one if applicable

An infant's respiratory rate is typically between 30 to 60 breaths per minute and normally involves abdominal movement *(Whaley & Wong, 1989)*. When breathing is laboured, retractions (indentation of chest wall during breathing) may be present. Retractions may indicate an inadequate distension of the lungs during inspiration. This may be due to lung disease or obstruction of airflow through the nose, larynx, trachea, or bronchi *(Korones, 1981)*.

This item should be scored, using the appropriate descriptors, if the infant's respiratory rate is greater than 60 breaths per minute, with or without the presence of retractions.

When determining the infant's respiratory rate, the infant must be quieted if crying is present.

When counting respirations, a hand may be placed on the infant's back, side, or chest, particularly if the infant is asleep, or by direct observation of the chest and abdominal area.

Respirations must be counted for a full minute to determine the infant's respiratory rate.

EXCESSIVE SUCKING

SCORE

1	

if applicable

This item should be scored if the infant displays increased (more than three times) rooting (turns head to one side searching for food) while displaying rapid swiping movements with the hand across the mouth in an attempt to suck on their fist, hands, or a pacifier prior to or after a feeding *(Finnegan & Kaltenbach, 1992)*.

POOR FEEDING

SCORE

2	

if applicable

This item should be scored if the infant demonstrates excessive sucking (see previous item) prior to feeding, yet sucks infrequently during a feeding, taking a small amount of formula and/or demonstrates an uncoordinated sucking reflex (difficulty sucking and swallowing). Also score if the infant continuously gulps the formula while eating and stops frequently to breathe. Normally, infants will suck at a steady rate without taking rest periods to breathe. Normal sucking behaviour is the result of a well-coordinated sequence of sucking, swallowing, and breathing *(Wolff, 1968; Vandenberg, 1990; Burke, 1977)*.

***NOTE**: Poor feeding may be scored during the current scoring interval or may be documented for the next scoring period. Both are acceptable. Whatever pattern of documentation is selected, it should be used consistently with each observational period.*

REGURGITATION AND VOMITING

Regurgitation

SCORE

2	

if applicable

Regurgitation is the effortless return of gastric or esophageal contents from the infant's mouth. It is not unusual for newborn infants to regurgitate during burping. However, for this scoring tool, regurgitation is frequent (two or more times) and is not associated with burping *(Whaley & Wong, 1989; Harper & Yoon, 1987)*.

This item should be scored if regurgitation, not associated with burping, occurs two or more times during a feeding *(Whaley & Wong, 1989)*.

Projectile Vomiting

SCORE

3	

if applicable

Projectile vomiting is forceful ejection of stomach contents from the infant's mouth *(Harper & Yoon, 1987)*. This item should be scored if one or more projectile vomiting episodes occurs either during or immediately after a feeding.

STOOLS

Loose Stools

SCORE

2	

if applicable

This item should be scored if the infant has a stool, which may or may not be explosive, that is curdy or seedy in appearance. A liquid stool without a water ring on the diaper should also be scored as a loose stool.

Watery Stools

SCORE

3	

if applicable

This item should be scored if the infant has a soft, mushy, liquid, or hard stool that is accompanied by a water ring on the diaper.

APPENDIX E: Effects of Prenatal Substance-Exposure on Infants

Effects of prenatal substance exposure on infants are difficult to distinguish from effects of poverty, inadequate social support, low maternal education, poor environmental conditions, poor nutrition, infrequent prenatal care, or marginalization with respect to any of the social determinants of health *(Marcellus & Kerns, 2007)*. Although there may be early withdrawal symptoms observed from intrauterine cocaine and opioid exposure, there were no mental, motor, or behavioural effects found at one, two or three years of age in a large longitudinal study in the United States *(Messinger et al., 2004)*.

In the following table, common drugs that may be taken in pregnancy are listed with the effects on infants that have been reported *(Weiner & Finnegan, 2006; Schechner, 1998; Organization of Teratology Information Specialists [OTIS], (2005; 2006a; 2006b; 2007); Sanz, De-las-Cuevas, Kiuru, Bate, & Edwards, 2005; Centre for Addiction and Mental Health, 2007)*. The acronym "WITHDRAWAL" has been used to describe symptoms of neonatal abstinence from opioids *(ACoRN, 2005)*. Many of these symptoms may be seen in newborns exposed to other drugs, and newborns exposed to opioids may exhibit only a few of the symptoms included in neonatal abstinence syndrome.

It is important to assess each newborn individually and to support the mother/caregiver in providing a nurturing environment.

Possible Neonatal Withdrawal Symptoms Related to Drug Exposure

		Alcohol	Caffeine	Cocaine	Marijuana	Methamphetamine	Nicotine	Opioids	Sedatives	SSRI
W	Wakefulness			X				X		
I	Irritability	X	X	X		X	X	X	X	X
	Increased tone	X		X		X		X	X	X
T	Tremor	X	X	X	X	X	X	X	X	X
	Seizures	X		X		X		X	X	X
H	High pitched cry			X	X	X		X		X
	Increased heart rate		X					X		X
D	Diarrhea							X	X	
	Diaphoresis/sweating							X	X	
R	Restlessness	X		X				X	X	X
	Rapid breathing	X	X					X		X
A	Apnea							X	X	
W	Weight loss, poor suck, vomiting	X		X		X		X	X	X
A	Abnormal sleep patterns		X	X	X	X		X	X	X
	Abrasions of skin							X		
L	Lacrimation							X		

APPENDIX E: Effects of Prenatal Substance-Exposure on Infants

Drug	Possible Effects on Newborn
Alcohol	➢ Preterm birth; small for gestational age ➢ FASD - continuum of severity ➢ FAS estimated in 30 to 40% of infants exposed to heavy alcohol use ➢ Enters breast milk at levels similar to maternal blood levels, yet eliminated at half the rate
SSRI Antidepressants	➢ Slow onset; may last several days ➢ Excreted into breast milk in small amounts - although compatible with breastfeeding, watch for drowsiness and difficulty feeding
Caffeine (>500mg/day) (Coffee/tea/cola = 50 to 100 mg per serving)	➢ Passes into breast milk - peak level within one hour of maternal consumption (large amounts may accumulate and cause irritability and poor sleeping patterns in baby)
Cocaine and Crack	➢ Preterm birth; abruption; small for gestational age ➢ No withdrawal syndrome, but may cause neurobehavioural impairment - usually on days 2 and 3 ➢ CNS irritability followed by a period of hyporeactivity and poor feeding ➢ Passes into breast milk - breastfeeding not recommended
Marijuana (pot, grass, weed, blunts, hash, reefer)	➢ Small for gestational age (depending on amount used) ➢ Excreted in moderate amount in breast milk - Breastfeeding not recommended
Methamphetamine	➢ Preterm birth; small for gestational age ➢ Longer half-life than cocaine ➢ Increased risk of SIDS ➢ CPS and AAP do not recommend breastfeeding
Nicotine (cigarettes contain other harmful compounds in addition to nicotine)	➢ Preterm birth; small for gestational age ➢ Increased risk of SIDS, childhood respiratory illnesses, and middle-ear infections ➢ Associated with lower basal prolactin levels - decreased milk supply
Opioids	➢ Preterm birth; small for gestational age ➢ Increased risk of SIDS ➢ Some research suggests problems with learning and attention in childhood ➢ Onset of withdrawal from heroin - 1 to 3 days; from methadone - 3 days to 2 weeks ➢ Breastfeeding recommended; rapid metabolism of codeine may cause accumulation of morphine - watch for excessive drowsiness as a sign of overdose in breastfed newborn
Sedatives/ Benzodiazepines	➢ Greater risk of seizure than in babies withdrawing from opioids ➢ Most benzodiazepines are excreted into breast milk at low concentrations (less than 5% of maternal dose)

APPENDIX F: Teaching Tool for Parents and Caregivers of Substance Exposed Infants

GOAL: Parents (or caregiver) will acquire the knowledge and skills specific to the special care needs of an infant exposed to a substance during pregnancy. The parent/caregiver will:

Strategies	Date/Comments	RN	Care-giver
Feeding Techniques ❒ Be aware of hunger and fullness cues ❒ Burp baby gently and often ❒ Recognize signs of dehydration ❒ For breastfed babies, review expressing, handling, storage, and transporting of breast milk ❒ Be aware of drugs that require "pump and dump" of expressed breast milk			
Comforting Techniques ❒ Swaddle the infant ❒ Use a variety of holding techniques ❒ Offer baby a soother ❒ Give baby a warm bath or gentle massage ❒ Describe other possible comforting strategies			
Infant Safety ❒ Review information on Period of Purple Crying and shaken baby syndrome ❒ Be aware of increased risk for SIDS ❒ Verbalize ways to reduce risk of SIDS			

APPENDIX F: Teaching Tool for Parents and Caregivers of Substance Exposed Infants

Strategies	Date/Comments	RN	Care-giver
Health of infant ❒ Be aware of the benefits of a smoke free and drug free environment ❒ Be aware of the importance of attending appointments with pediatrician ❒ Review and sign Infant Development Program referral ❒ Recognize extra care needs of substance exposed babies ❒ Be aware of when baby's immunization schedule starts ❒ Know when to call the doctor and public health nurse ❒ Be aware that CPR training is recommended			
Parent - Infant Interaction ❒ Recognize and respond to early signs of infant stress ❒ Decrease sensory overload if needed (light, noise, activity, touch) ❒ Demonstrate sensitivity and responsiveness to baby's temperament			
Self-care for parents ❒ Recognize the benefits of sleeping (resting) when baby sleeps ❒ Be aware of resources for healthy eating ❒ Develop/refer to safety plan ❒ Be aware of specific community resources/services available			

APPENDIX G: Pumping, Storing, and Transporting Breast Milk

Commonly Asked Questions

How Often Should I Pump?

If separated from baby

- Pump eight to ten times in 24 hours
- If pumping long-term, pump five to six times a day while baby is hospitalized
- Two weeks before baby comes home, increase pumping to eight times a day, including at least one time during the night

To increase milk supply

- Pump five to ten minutes per side after each daytime feed
- Give expressed breast milk to baby

How Do I Store My Milk?

- Store in containers that have been cleaned in hot soapy water and then thoroughly rinsed and air dried, or cycled through a dishwasher
- Date containers
- Glass is the best choice for milk storage because it does not absorb the antibodies or other proteins in the milk
- Avoid soft plastic bottle liners for milk storage - reduces the content of certain antibodies
- Fill containers only 3/4 full when freezing milk

For how long can I safely store breast milk?

- Up to four hours at room temperature
- Three days in a fridge that has a temperature of 0 to 4°C. Store at the back of the refrigerator, not in the door
- One month in a freezer compartment that is inside a fridge
- Up to six months in a fridge freezer that has a separate door for the freezer. Keep milk on the back top shelf (-18° C)
- Six to 12 months in a deep freeze (-20° C)

How do I Care for the Equipment After Pumping?

After each use:

- Take the pump apart and rinse with cold water to remove all traces of milk
- Wash all pump parts in warm soapy water and rinse soap off well
- Air dry upside down on paper towels. (Do not use soap on Medela Electric Adapter/Filter)

- If your baby is premature or sick, Baby's Best Chance (page 106) recommends that you sterilize pump parts once every 24 hours. Boil parts for 10 minutes in a large pot of water making sure that all parts are fully covered by the water

How Should Expressed Breast Milk (EBM) be Transported?

- Clearly label EBM with your name, the date, and time the milk was pumped
- Transport EBM in a cooler, on ice
- Fresh (unfrozen) EBM can remain at room temperature for four hours
- Frozen EBM should not be re-frozen if it has started to thaw

How do I use Frozen Breast Milk Safely?

- Always use the oldest milk first
- Shake well after defrosting
- Warm the milk in warm tap water
- Do not use the microwave to heat breast milk because the uneven heating can burn baby's mouth
- Do not re-freeze breastmilk
- Once thawed, EBM may be refrigerated for up to 24 hours in the fridge
- To avoid waste, thaw only what will be used at one feeding

Will Expressed Milk Always Be the Same?

- Breast milk can look different at different times. Often it looks clear and watery, but sometimes may look thicker. It can be a bluish color, a rich yellow, or even green-tinged. What you eat can affect the color.
- You may notice milk fat on the surface of milk that has been refrigerated. Just shake it to mix it back in
- Breast milk that has been frozen will taste and smell different than fresh milk, and will not be as good as fresh milk at destroying germs. However, frozen milk is still much better for your baby than formula!

See: *Lauwers, J. & Swisher, A. (2005). Counseling the Nursing Mother; A Lactation Consultant's Guide (4th edition). Sudbury, Ma; Jones & Bartlett.*

A consultation was requested from Fraser Health Ethics Services in regards to the policy and practice of meconium testing in newborns. Ethics in clinical decision-making is about following a systematic approach for reflecting on the values embedded in a clinical situation with the aim of choosing the most justified option based on a shared understanding of the facts and values. The role of Ethics Services is to facilitate a collaborative process that ensures the appropriate values are considered and explored within the context of the issue at hand.

The following are the steps in the collaborative decision process used by Fraser Health Ethics Services:

1. Clarifying the question at hand
2. Outlining the facts of the case so that all relevant parties are operating with the same information
3. Articulating and prioritizing the values central to the issue
4. Reflecting on what each value requires in the solution, if it is to be respected
5. Designing a solution that meets the demands of all key values
6. Critically examining the reasons for supporting the option chosen against differing perspectives
7. Making a decision

Sarah Gebauer and Bashir Jiwani from Ethics Services facilitated two meetings on this issue - a summary of the review process and outcome are contained below.

MEETING DATE: 15 JUNE, 2007

The group identified the key question as being: **What should Fraser Health's response be to requests for meconium testing?**

- In relation to this question, the group explored what they believed to be true about meconium testing and identified gaps in their knowledge that required a review of the literature.

We then asked the group to ponder the following statement: **However we answer the key question, it is important that…**

- The process here consisted of a brainstorming exercise in which the group collectively came up with a list of values and corresponding rank in terms of its priority on a scale of one to five. The values were then totalled, averaged based upon the number of respondents, and ranked (with one being the most important)

- Of the 26 identified values, we then explored the top six rated groupings, three of which incorporate a number of other values within their scope.

1. Best interests of the child:
- Protect the safety and well-being of the child
- Remove children from unsafe environments
- Get the healthiest infants possible
- Don't cause undue harm to infant
- Protect the infant at all cost

2. Support for mothers:
- Support mothers to parent well
- Help women make choices for healthy lifestyles
- Build trusting relationships with mothers
- Not increase the barriers to support that marginalized women face
- Respect women's choice and their autonomy
- Provide support to mothers who need it
- Protect mother at all cost

3. Effectiveness:
- Act only upon reliable evidence facts
- Do not put more weight on the results of a test than evidence suggests it can provide
- Social workers understand what meconium testing provides
- Only do tests for good reasons

4. Test infant/mother only if we can do something about it

5. Keep families together as much as possible

6. We are consistent in our response to mother's behaviour

In the time between the first and second meetings, an extensive literature review was conducted and shared with the participants.

MEETING DATE: 8 AUGUST, 2007

The group explored and tested a set of possible answers to the key question.

Possible answers to the key questions are: (bolded options are tested below).

- **At the request of the ministry**
- **Universal screening**
- **Only with a court order**
- Whenever mother's consent is not respected/required; a clear justification articulated
- **Only if medically necessary**
- Ministry uses alternative methods for achieving goals

- Delegate social workers to order test and done only on their orders
- Default to provincial guidelines
- Only on doctor's orders
- **Do not use**
- **Only with mother's**/legal guardian's **informed consent to specific test**
- At fathers request
- Chain of evidence - at the discretion and under the direction of risk management
- Ministry uses alternate methods for achieving goals

Testing of Possible Solutions against Values

	At the Request of the Ministry	Universally	When Medically Necessary	Upon Order of the Court	Never - Would Not Be Used	With Informed Consent from Mother
1. Best interests of the child	X	X	?	?	√	?
2. Support for Mothers	X	X	X	X	√	√
3. Effectiveness	X	√	X	X	√	X
4. Test only if we can do something about it	X	X	X	X	N/A	X
5. Keep families together as much as possible	X	X	X	X	√	√
6. Act consistently in response to mother's behaviour	X	√	X	X	√	√

According to the above chart and further reflection, the group has determined that the best answer as to how to approach this issue is: **DO NOT USE MECONIUM TESTING**.

For further reading related to the ethical issue of meconium testing, see: M*arcellus, 2007; and, Zadunayski, Hicks, Gibbard, & Godlovitch, 2006*.

APPENDIX I: Recommended Roles and Responsibilities for Members of the Interdisciplinary Team in Relation to Discharge Planning

Parents and Caregivers

- Participate in discharge planning process and follow-up activities

Family Physician

- Provide medical support for the mother
- Provide pertinent information about mother's (and father's) health and social history on Antenatal Record Part I
- Provide follow-up medical support for the infant in collaboration with the pediatrician following discharge

Pediatrician

- In-hospital-admit, treat and discharge the infant
- Provide other members of the team with timely notice of intent to discharge
- Provide follow-up medical support in collaboration with family physician
- Complete Sections 2 to 4 of the **Child's Permanent Medical Record** provided by the MCFD social worker *(Appendix M)*
- Attend the discharge planning meeting

Registered Nurse: Neonatal Intensive Care Unit (NICU)/Pediatrics/Maternity

- Initiate education and skill building of parent(s) and/or alternate caregivers, and complete Parent and Caregiver Teaching Tool *(Appendix F)*
- Complete referral to Infant Development Program
- Complete care instructions on Discharge Form *(Appendix J)*
- Initiate public health referral

Hospital Social Worker

- Advocate for infant/parent/family
- Complete psychosocial assessment and provide clinical counseling to parent/family (i.e. crisis and loss counseling; addictions and relapse prevention; safety from relationship violence; postpartum adjustment)
- Identify strengths, risks, and barriers to safe discharge of baby, in consultation with MCFD/delegated Aboriginal agency
- Assist mother to complete her Safety Plan *(Appendix K)*
- Provide information and make referrals to community-based supportive services
- Coordinate and facilitate interdisciplinary team discharge planning meeting

APPENDIX I: Recommended Roles and Responsibilities for Members of the Interdisciplinary Team in Relation to Discharge Planning

MCFD/Delegated Aboriginal Agency Protection Social Worker

- Assess the infants need for protection and complete an Immediate Safety Assessment plan [ISA] (MCFD, 1996) to determine the most appropriate response available that can adequately protect the child. Responses may range from providing support services through to protection investigations and removals
- Gather information on the medical condition of the infant
- Maintain contact with the birth family
- In collaboration with the hospital social worker, ensure appropriate support services are available for the needs of the mother and infant
- Initiate a Risk Reduction Service Plan that addresses the safety and well-being of the child in partnership with the family, extended family and community *(MCFD, 1996)*
- If no other less disruptive measures are available and adequate to protect the child, remove the child
- Complete the **Child Removal Form** *(Appendix A)*. Document direction regarding birth parent visitation on the form and give form to mother's primary nurse to be filed in both the mother's and baby's hospital charts
- Complete Section 1 of **Child's Permanent Medical Record** *(Appendix M)*

MCFD Resource Social Worker

- Collaborate with the MCFD protection social worker to gather information
- Select an appropriate foster home and ensure that the foster parents have the necessary skills, training and support to manage the specific needs of the infant
- Monitor placement and assess need for relief

Public Health/Hospital Liaison Nurse

- Participate in discharge planning as appropriate
- Initiate Best Beginnings Postnatal assessment upon receipt of discharge referral
- Inform parent(s)/caregiver(s) of public health nurse role following discharge

Discharge Form: Women with Perinatal Substance Use Concerns and Their Children

Date of Discharge Meeting: _____ Date of Discharge: _____

Baby's Name: _____ Birth Date: _____

Feeding Plan: _____

Mother's Wishes: _____

Special Considerations *(effective soothing techniques, environment, skin care, etc.)*

_____

_____

☐ Teaching Record Complete ☐ Special Delivery Booklet Given

☐ Maxxine Wright Community Health Centre Flyer Given

Care Contacts	Name	Phone Number
Family Physician		
Pediatrician		
Hospital Social Worker		
MCFD Social Worker		
Public Health Nurse		
Infant Development Program		

Appointments Dates:

Pediatrician: _____

MCFD Social Worker: (Assessment and Planning) _____

Other: _____

Other: _____

Referral sent to: ☐ Public Health Office ☐ Infant Development Program

Where MCFD has Guardianship:

☐ Consents signed for immunizations/medical care/community referrals

Visit schedule and restrictions:

Location _____ Frequency _____

cc

☐ Birth Parents ☐ Foster/Alternate Caregivers ☐ MCFD SW ☐ Hospital SW
☐ Pediatrician ☐ Family Physician ☐ PHN ☐ Chart

_____ Safety Plan

Step 1: Awareness: Slips/lapses may occur

A slip may occur when:

a) _____

b) _____

c) _____

d) _____

Step 2: Preventing a 'slip'

When experiencing a strong craving I will contact one or more of the following people for support:

a) _____

b) _____

c) _____

d) _____

Step 3: Planning

These are the names and phone numbers of people I trust to care for my child/ren:

a) _____

b) _____

c) _____

d) _____

Step 4: Strategies for stress relief (What I will do when I'm going to lose it)

a) _____

b) _____

c) _____

d) _____

APPENDIX L: Consent to Routine Medical Care

(In Accordance with Section 94 of the CFCSA)

CHILD'S FULL NAME:	GENDER:
PERSONAL HEALTH NUMBER:	DATE OF BIRTH:

I, _____, the legal guardian of the above-named child,
Name of Legal Guardian (Social Worker)

delegate my authority to consent to the routine medical care, such as:

_____
eg. Immunization/Routine Medical Check-up

of the above-named child to: _____
Name of Caregiver

This consent applies from _____ to _____
Date Consent is Valid *Date Consent Expires*

LEGAL GUARDIAN/SOCIAL WORKER SIGNATURE	DATE:

LEGAL GUARDIAN/SOCIAL WORKER ADDRESS:
TELEPHONE NUMBER:

Ministry of Children & Family Development

NAME OF CHILD	GENDER	BIRTHDATE (YYYY/MM/DD)	CHILD'S PERSONAL HEALTH NUMBER

SECTION I – FAMILY HISTORY For completion by worker in co-operation with family physician

MOTHER'S NAME		MOTHER'S BIRTHDATE (YYYY/MM/DD)	ETHNIC ORIGIN
FATHER'S NAME		FATHER'S BIRTHDATE (YYYY/MM/DD)	ETHNIC ORIGIN
SIBLING NAME	BIRTHDATE (YYYY/MM/DD)	SIBLING NAME	BIRTHDATE (YYYY/MM/DD)
SIBLING NAME	BIRTHDATE (YYYY/MM/DD)	SIBLING NAME	BIRTHDATE (YYYY/MM/DD)

FAMILY HISTORY OF ILLNESS: Please indicate below any family member(s)' medical problems

FAMILY MEMBER	DESCRIBE MEDICAL PROBLEM

PLEASE USE A SEPARATE SHEET IF MORE SPACE IS REQUIRED

Signature of worker

Date (YYYY/MM/DD)

SECTION II – BIRTH RECORD For completion by health care provider – PLEASE RECORD LEGIBLY (attach a separate sheet if more space is required)

KNOWN HEALTH PROBLEMS DURING MOTHER'S PREGNANCY			
MOTHER'S STATUS REGARDING: **HEP B** ☐ POSITIVE ☐ NEGATIVE **HIV** ☐ POSITIVE ☐ NEGATIVE **HCV** ☐ POSITIVE ☐ NEGATIVE			
PRENATAL EXPOSURE TO DRUGS AND/OR ALCOHOL (frequency & amount)			
GESTATION OF PREGNANCY	BIRTH WEIGHT	APGAR	HEAD CIRCUMFERENCE
DELIVERY (normal/complications)			
KNOWN NEONATAL PROBLEMS (e.g. alcohol/drug effect/medical)			

PHYSICIAN'S NAME (please print)	PHYSICIAN'S SIGNATURE	BILLING CODE NUIMBER
ADDRESS	EXAMINATION DATE (YYYY/MM/DD)	

SECTION III – CHILD'S PAST MEDICAL HISTORY **PLEASE RECORD LEGIBLY** (attach a separate sheet if more space is required)

SIGNIFICANT ILLNESS
CHRONIC MEDICAL CONDITIONS
ACCIDENTS OR OPERATIONS
HOSPITALIZATIONS
PREVIOUS CONCERNS OF ABUSE OR NEGLECT
MENTAL HEALTH (diagnosis, treatment, referral)
DEVELOPMENTAL/BEHAVIOURAL DIFFICULTIES
MEDICATIONS (specify)
ALLERGIES (specify)

SECTION IV – IMMUNIZATIONS: Please indicate whether this child has been given the following immunizations

DPTP Hib	☐ 2 months	☐ 4 months	☐ 6 months	☐18 months	
Hepatitis B	☐ 2 months	☐ 4 months	☐ 6 months	☐18 months	☐ 5 years
MMR	☐ 12 months	☐ 18 months			
DPTP	☐ 5 years				
Diptheria tetanus	☐ 14 – 16 years				

PHYSICIAN'S NAME (please print)	PHYSICIAN'S SIGNATURE	BILLING CODE NUIMBER
ADDRESS	EXAMINATION DATE (YYYY/MM/DD)	

INITIAL PHYSICAL EXAMINATION

AGE	WEIGHT	HEIGHT	PULSE	BLOOD PRESSURE	HEAD CIRCUMFERENCE (INFANTS)
GENERAL APPEARANCE					

PLEASE RECORD LEGIBLY

	A. NORMAL	a) ABNORMAL
Colour		
Skin		
Head and Neck		
Hair and Scalp		
Eyes		
Ears		
Nose		
Mouth		
Teeth		
Neck		
Lymph Nodes		
Respiratory System		
C.V. System		
Abdomen		
Genitalia		
Musculoskelatal		
C.N.S. (i.e. gait, reflexes)		
Marks, Bruises		
Others:		
Behaviour		
Lab Work		
Final Impressions		
Recommendations		

PHYSICIAN'S NAME (please print)	PHYSICIAN'S SIGNATURE	BILLING CODE NUIMBER
ADDRESS	EXAMINATION DATE (YYYY/MM/DD)	

SUBSEQUENT PHYSICAL EXAMINATION

AGE	WEIGHT Percentile	HEIGHT Percentile	PULSE	BLOOD PRESSURE	HEAD CIRCUMFERENCE (INFANTS) Percentile
GENERAL APPEARANCE					

PLEASE RECORD LEGIBLY

Chief Complaint:
Physical Exam:
Impressions:
Plan:
Follow-up:

PHYSICIAN'S NAME (please print)	PHYSICIAN'S SIGNATURE	BILLING CODE NUIMBER
ADDRESS	EXAMINATION DATE (YYYY/MM/DD)	

PLEASE RETURN WHEN COMPLETE, MARKED "*PERSONAL & CONFIDENTIAL*" TO:

Name of worker: _____

Office Address: _____

APPENDIX N: Infant Development Program (IDP) Referral to Fraser Region Offices

Family Information

Name of infant: _____

D.O.B.: _____

Age at referral: _____ Gender: _____

Mother's Name: _____

Father's Name: _____

Address: _____

Telephone: (H) _____

(C) _____

Siblings

Name: _____ Age: _____

Name: _____ Age: _____

Name: _____ Age: _____

Referral Data

Date of Referral: _____

Referral Source: _____

Reason for Referral: _____

Birth Information

Hospital: _____

Birth Weight: _____

Gestational Age: _____

Date of discharge: _____

Does the family self identify as Aboriginal? ☐ Yes ☐ No

Interpreter required? ☐ Yes ☐ No Language: _____

Are there any cultural or religious observances of which we should be aware?

_____

Agencies Involved:

Name of Social Worker: _____ Phone: _____

Who is the child with: ☐ Parent ☐ Family member ☐ Foster Parent

Medical Concerns:

_____

_____

Additional Information:

_____

_____

Parent is informed about the IDP program and wishes to participate.

Parent Signature: _____

Name of Person Completing Form: _____

APPENDIX N: Infant Development Program (IDP) Referral to Fraser Region Offices

Burnaby/New Westminster ***Serves:*** Burnaby; New Westminster	2702 Norland Avenue Burnaby, BC V5B 3A6	p: 604.292.1270 p: 604.292.1273 p: 604.299.7851 x 263/264 p: 604.292.1271 f: 604.299.5921
Coquitlam ***Serves:*** Coquitlam, Port Coquitlam, Port Moody, Anmore, Belcarra	204 Blue Mountain Street Coquitlam, BC V3K 4H1	p: 604.525.6123 f: 604.525.3013
Ridge Meadows ***Serves:*** Maple Ridge (Whonnock, Ruskin, Webster's Corners), Pitt Meadows (Hammond), Katzie Reserve	100 22718 Dewdney Trunk Maple Ridge, BC V2X 3K2	p: 604.466.0787 f: 604.466.0587
Delta ***Serves:*** Delta (North Delta, East Delta) Ladner, Tsawwassen	3 3800 72nd Street Delta, BC V4K 3N2	p: 604.946.6622 f: 604.946.6223
Surrey/White Rock ***Serves:*** Surrey, White Rock	301A 8352 130th Street Surrey, BC V3W 8J9	p: 604.590.7302 f: 604.590.7362
Langley ***Serves:*** City of Langley, Langley Municipality (includes Aldergrove, Walnut Grove, Fort Langley)	203 – 5171 221A Street Langley, BC V2Y 0A2	p: 604.532.8184 f: 604.534.1814
Upper Fraser Valley ***Serves:*** Abbotsford, Chilliwack, Mission, Hope, Boston Bar, Agassiz, Columbia Valley	102 32885 Ventura Avenue Abbotsford, BC V2S 6A3 45474 Luckakuck Way Chilliwack, BC V2R 3S9 4 7337 Welton Street Mission, BC V2V 3X1 PO Box 2077 Hope, BC V0X 1L0	p: 604.852.2686 f: 604.852.5794 p: 604.824.8760 f: 604.824.8735 p: 604.820.9536 f: 604.820.9568 p: 604.860.7731 f: 604.869.2994