Perinatal Services BC Obstetric Guideline
Management of the Mother / Fetus and Newborn Near the Threshold of Neonatal Viability (22–25 Completed Weeks)

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Table of Contents

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Introduction

The purpose of this guideline is to provide general guidance regarding the provision of care to women facing the birth of an infant of extremely low gestational age (22–25 completed weeks gestation). In British Columbia in 2000, 132 infants were born <28 weeks gestation and >500 grams, which accounts for approximately 4.6% of all preterm births.[1] This clinical scenario requires complex decision making involving the mother, family, infant, and society. It is important to appreciate that this guideline is intended to be a **general framework** for decision making, and the **individual circumstances** of specific situations must always be taken into consideration.

This guideline was reviewed in November 2016 and reaffirmed at that time.

Guiding Principles

1. This guideline is framed in terms of completed weeks gestation, but is based on the important concept of a gradual progression of maturity as gestation advances. E.g. 22 completed weeks includes the time span from 22^0 to 22^6 weeks.
2. Multidisciplinary involvement is recommended in view of the complex and conflicting interests and priorities, particularly of the mother and fetus/infant. A multidisciplinary approach ideally includes obstetrics, pediatrics, maternal fetal medicine, neonatology, and nursing.
3. Maternal/fetal and neonatal consultation should be obtained early to allow for appropriate communication with the family and the formation of an agreed upon management plan.
4. Parental participation in decision making is vital.
5. The clinical situation may constantly change due to maternal factors and advancing maturity. Ongoing communication regarding the changing situation between the disciplines involved and the family is important.
6. Provision of care and management decisions must be based on the "best assessment" of gestational age and fetal weight. Accordingly, every effort should be make to ascertain these parameters as accurately as possible.
7. For births at gestational ages from 23^0 to 25^6 weeks, a neonatologist or delegate should attend for delivery. For births at gestational ages from 22^0 to 22^6, a neonatologist or delegate will attend at his/her discretion. When, at a gestational age of 22^0 weeks, a decision not to resuscitate has been made by the neonatologist, obstetrician, and the parents at a prebirth consultation, it is acceptable and appropriate that the neonatologist not attend at the delivery.
8. Faced with impending delivery, obstetrical and neonatal "intervention" should follow these general guidelines:

Table 1: Clinical Guidelines

(From Children's & Women's Health Centre of B.C. Expert Committee chaired by Dr. R. Liston)

Gestational Age (weeks)	Obstetrical Management Plan	Neonatal Management Plan
22^0 to 22^6	Supportive Care	* Compassionate Care
23^0 to 23^6	** Medical support – possible surgical intervention	Possible resuscitation
24^0 to 24^6	** Medical support – surgical intervention should be considered if indicated.	Almost all infants will be actively resuscitated
25^0 to 25^6	Surgical intervention if indicated	All infants will be actively resuscitated

* Compassionate care is the provision of companionship and comfort. The mother and family should be supported in remaining with their infant should they wish.

** Medical support includes all maternal care, intermittent auscultation of the fetal heart with recourse to the administration of IV fluids, oxygen and maternal positioning.

Note: In a situation where operative intervention is likely to be considered in addition to medical support, continuous fetal monitoring may be instituted.

9. Where significant differences emerge between a proposed plan and the parental wishes, consideration should be given to obtaining a second medical opinion or holding a group discussion with the parents in an effort to find consensus.
10. Requests for antenatal transport in the face of threatened preterm delivery should be considered from 23^0 weeks gestation onwards.
11. Infants receiving active compassionate care will be provided with companionship, warmth, and comfort. The mother and family should be supported to remain with their infant should they wish.
12. For the purposes of care planning, all care providers should have a general shared concept of neonatal survival rates and disabilities. See Table 2 below.

Table 2: Neonatal Survival and Disability Rates[2]

Gestational Age	Survival Rates	Disability
<22 Completed Weeks (154 days)	Fetus is not viable.	
22 Completed Weeks (154 to 160 days)	Survival very infrequent.	Data on disability in survivors are limited.
23 to 24 Completed Weeks (161 to 174 days)	Infants born at just 23 weeks may have very different prognoses from those born at almost 25 weeks. Reported neonatal survival rates increase rapidly within this 2-week interval, varying from 10% to 50%.[3,4,5,6,7,8,9]	Among surviving infants, 20% to 30% have disabilities such as cerebral palsy, hydrocephalus, severe cognitive deficit, blindness, deafness, or a combination.[10,11,12,13] Although most disabilities[14] in these infants are mild or moderately severe,[15,16,17,18] up to 10% are severe and necessitate significant caretaking, far beyond that usually required by infants of their age.[19]
25 to 26 Completed Weeks (175 to 188 days)	Survival rates are 50% to 80%.[3,4,6,8,9]	Impairments and disabilities[14] such as those previously described affect 10% to 25% of these infants.[10,11]

13. Ensure referral to appropriate community resources and supports once infant is born.

See: Counselling and management for anticipated extremely preterm birth. Canadian Paediatric Society Position Statement, October 2012, reaffirmed January 2015.
www.cps.ca/documents/position/management-anticipated-extremely-preterm-birth

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