

# Provincial Parenteral Manual User Guide



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### 1. Background

The Provincial Parenteral Manual arose out of the necessity to provide consistent policies, drug therapy guidelines, and parenteral drug information at each of the Alberta Health Services (AHS) and Covenant Health sites. The objective of this manual is to provide a convenient, accessible, and reliable reference for all health professionals involved with parenteral drug administration.

Prior to the provincial AHS reorganization, the various regions and the Alberta Cancer Board had their own parenteral manuals. The Provincial Parenteral Manual is a compilation of their efforts, and consultation with stakeholders, programs, and zones as needed. The information in the parenteral monographs is based on established procedures reported in literature sources and current practice within the zones and province.

The Provincial Parenteral Manual is maintained by Pharmacy Services through AHS Drug Information, and is approved by the Provincial Medication Management Committee (PMMC).

## Existing site specific monographs are to be used until a new monograph is available in the Provincial Parenteral Manual.

The Provincial Parenteral Manual is **NOT**:

- A comprehensive drug reference. The manual is to be consulted first for information on medication administration. If the information does not address specific patient needs, consult alternative sources.
- A policy.

The manual is meant to be a guidance document for best practice.

Healthcare professionals must use clinical judgment when their practice does not match the information in the Provincial Parenteral Manual, and the decision must be documented.





## 2. Blood Products, Vaccines, and Oral and Inhaled Drugs

The Provincial Parenteral Manual does not contain monographs for blood products, vaccines, or drugs administered orally or by inhalation. Refer to the zone-specific policies and procedures for more information.

## 3. Definition of Neonates, Infants, Children, Adults, and Geriatrics

For the purposes of this manual, the ages for neonates, infants, children, and adults will be defined as follows:

- Neonates: 0 to 28 days (this refers to post-natal age unless indicated)
- Infants: 1 to 12 months

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- Children: 1 year to less than 18 years
- Adults: 18 to 64 years
- Geriatrics: 65 years and older





## 4. Standards

#### 4.1 Required Education, Equipment, or Monitoring

The *Required Education, Equipment or Monitoring* section of the Provincial Parenteral Manual is a standard of practice, and is approved by the Provincial Medication Management Committee (PMMC). Healthcare professionals administering the drug must have the individual competence, experience and education identified in this section, and be knowledgeable in operating required equipment and/or performing the monitoring. The specified equipment must be readily available, and the required monitoring must be performed and documented.

#### 4.1.1. Restrictions to Patient-Care Areas:

The parenteral monographs do NOT include restrictions to specific patient-care areas within hospitals. Drugs may be administered in an area provided that required equipment and a healthcare professional (see <u>Definitions document</u>) with the knowledge to administer the drug and perform the required monitoring are available. Sites are able to restrict specific drugs/infusions based on the above considerations, using local and/or provincial policies or procedures.

#### 4.2 • Clinical Competence

Clinical competence is the responsibility of the individual practitioner and encompasses the knowledge, skill, ability and judgment required for safe and ethical clinical practice. Clinical activities may have been taught in basic education programs, however the clinical competence required to perform these skills, may require additional education and supervised practice.

#### 4.3 Off-Label Use of Drugs

This "evidence based" information in the Provincial Parenteral Manual is obtained from several sources, including the manufacturer, literature, and from current practice provincially, nationally and/or internationally. References to this information are available. Recommendations on indications, administration routes, or use in age groups that are outside the manufacturer's labeling (i.e. off-label use) are also included. Examples include the approved IV use of haloperidol and ketorolac in the parenteral manual, even though the manufacturers indicate that these drugs are for IM use only.

It is important the healthcare professional applying this information review the evidence, rationale and practices to support the off-label use of the drug. Every healthcare professional is responsible to make an informed decision.





## 5. Abbreviations for Parenteral Monographs ONLY

2/3-1/3	dextrose 3.3% and sodium chloride 0.3%
ABW	actual bodyweight
ANC	absolute neutrophil count
AST	aspartate aminotransferase
ALT	alanine aminotransferase
APTT	activated partial thromboplastin time
/	
BMT	bone marrow transplant
BP	blood pressure
BUN	blood urea nitrogen
BWI	bacteriostatic water for injection
	,
<sup>o</sup> C	Celsius or centigrade
CBC	complete blood count
CF	cystic fibrosis
cm	centimeter(s)
CHF	congestive heart failure
CNS	central nervous system
CO <sub>2</sub>	carbon dioxide
COPD	chronic obstructive pulmonary disease
Cr	creatinine
CrCl	creatinine clearance
CVS	cardiovascular system
dL	deciliter(s) (= 100 mL)
D5-1/2NS	dextrose 5% and 0.45% sodium chloride
D5LR	dextrose 5% and lactated Ringer's
D5NS	dextrose 5% and 0.9% sodium chloride
D5R	dextrose 5%/ ringers
DSS	dextrose saline solutions
D5W	dextrose 5% in water
D10W	dextrose 10% in water
D20W	dextrose 20% in water
DTHR	David Thompson Health Region
DVT	deep vein thrombosis
FCC	alastrosardiagram
ECG	electrocardiogram
EEG	electroencephalogram
ER	emergency room



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ESR	erythrocyte sedimentation rate	
ESRF	end stage renal failure	
ETT	endotracheal tube	
g	gram(s)	
GFR	glomerular filtration rate	
GI	gastrointestinal	
GU	genitourinary	
G6PD	glucose-6-phosphate dehydrogenase deficiency	
HCI	hydrochloride Hct hematocrit	
Hg	mercury	
Hgb / Hb	hemoglobin	
HR	heart rate	
IA	intra-arterial	
ICP	intracranial pressure	
ICU	intensive care unit	
IM	intramuscular	
INR	international normalized ratio	
IT	intrathecal	
IV	intravenous	
IVH	intraventricular hemorrhage	
KCI	potassium chloride	
kg	kilogram(s)	
L	liter(s) or litre(s)	
LBW	lean body weight	
LDH	lactate dehydrogenase	
LFT	liver function tests	
LMWH	low molecular weight heparin(s)	
LR	lactated Ringer's (or Ringer's lactate or Ringer's injection, lactated)	
M	molar	
m <sup>2</sup>	square meter	
MAP	mean arterial pressure	
MAX	maximum	
mcg	microgram(s) (= 0.001 milligrams)	
mEq	milliequivalent(s)	
mg	milligram(s) (= 0.001 grams)	



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MI	myocardial infarction
mL	milliliter(s)
mm	millimeter(s)
mmol (mMol)	millimole(s)
mOsm (mosm)	milliosmole(s)
NaCl NS 1/2NS NSAID NICU NSTEMI PACU PARR PCO <sub>2</sub> PICU pre-op / PREOP PT PTT/aPTT PVC	sodium chloride normal saline, 0.9% sodium chloride ½ normal saline, or NaCl 0.45% non-steroidal anti-inflammatory drug neonatal intensive care unit non-ST-elevation myocardial infarction post-anesthetic care unit post-anesthetic care unit post-anesthesia recovery room partial pressure carbon dioxide pediatric intensive care unit preoperative prothrombin time partial thromboplastin time polyvinyl chloride
R	Ringer's solution
RBC	red blood cell
RR	respiratory rate
SCr	serum creatinine
STEMI	ST-elevation myocardial infarction
SWI	sterile water for injection
TB	tuberculosis
TCO <sub>2</sub>	total carbon dioxide
TKVO	to keep vein open
TPN	total parenteral nutrition
WBC	white blood cell
w/v	weight per volume





## 6. Parenteral Monograph Template

The monograph template is available as a separate link under the User Guide, Definitions link on the Provincial Parenteral Manual home page, at nphonet.ca/pm/pm preview.asp?id=5707