OBJECTIVE

- To establish consistent practices that minimize the risk of inadvertent misuse or connection of all infusion therapy lines, e.g., intravascular infusion lines, subcutaneous intermittent injection ports, subcutaneous continuous infusion lines, epidural infusions, and enteral feeding lines.

PRINCIPLES

Accurate identification and labelling of infusion and feeding lines enhances patient safety.

All infusion lines shall be traced from the patient to the point of origin and shall be labelled appropriately.

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, Students, Volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary).

ELEMENTS

1. Tracing of Invasive Infusion Lines

   1.1 All infusion lines shall be traced for connection and labelling accuracy from the patient to the point of origin (bag, pump, syringe, and device):

      a) when care of the patient is initially assumed by a health care professional in conjunction with the patient assessment; and
2. **Infusion Line Identification and Tracing Requirements**

2.1 In addition to the requirement to identify and trace lines when care of the patient is assumed/re-assumed, infusion line identification and tracing shall take place in the following circumstances:

   a) prior to connecting or reconnecting an infusion line/tubing to a patient;
   
   b) when solution bags, syringes and/or devices are changed;
   
   c) when infusion lines/syringes are inserted into an infusion pump prior to starting the infusion pump; and
   
   d) prior to the administration of any medication through an infusion line to ensure that the medication is being administered via the intended route.

   **Note:** This requirement is in addition to any requirement to double check medication calculations or dosages in accordance with the Alberta Health Services (AHS) *Independent Double Check Policy* (PS-60-01).

2.2 Documentation of care provision for the patient shall include that the infusion lines were identified and traced.

   a) The specifics of the method of this documentation shall be determined by the individual facility/site/unit, based on current documentation practices and available resources.

2.3 Pediatric considerations:

   a) To decrease and assess the risk of potential tubing/line entanglement, refer to the AHS *Medical Tubing Entanglement: Prevention Strategies and Interventions for the Pediatric Patient* Guideline (PS-89-01) and the *Falls, Entanglement, Strangulation, and Entrapment (F-ESE) Assessment Tool*.

3. **Labelling**

3.1 Infusion pumps/devices that have the capacity to identify the solution/medication being infused through the pump/device shall be programmed to enable this feature.

3.2 Primary infusion line labels shall be attached to the infusion line superior to the injection port closest to the insertion point of the line into the patient and contain the following information:

   a) date and time the tubing was changed;
b) name of the primary infusion solution (and additives as indicated); and

c) type of line, i.e., peripheral intravenous line, arterial line, medial port of central line, feeding tube, etc.

3.3 Secondary infusion line labels shall be attached to the secondary infusion line closest to the point of connection between the secondary and the primary infusion lines and contain the following information:

a) date and time the tubing was changed.

3.4 Epidural lines and epidural pumps shall be clearly labelled as epidural.

3.5 Nerve block lines and nerve block infusion pumps shall be clearly labelled as nerve block.

3.6 Patient controlled analgesia (PCA) lines and PCA infusion pumps shall be clearly labelled as PCA.

3.7 Enteral feeding lines and enteral infusion pumps shall be clearly labelled as enteral.

4. Enteral Feeding Systems

4.1 When available, enteral infusions, including medications, shall be infused using exclusively enteral technology (i.e., pumps, syringes, lines, etc.) that are incompatible with parenteral infusion systems.

4.2 In the absence of an enteral pump that will deliver small volumes, use a parenteral syringe pump to administer enteral products with enteral syringes and enteral tubing that are not compatible with parenteral infusion systems and connection ports.

4.3 In the absence of an enteral pump and enteral syringe, use a parenteral syringe with enteral tubing that is not compatible with parenteral infusion systems and connection ports.

5. Patient/Family Education

5.1 Discuss line identification and tracing requirements as an element of safety.

a) Discuss the times and circumstances under which the process will occur and that disruption of rest/sleep may occur.

5.2 Discuss how patient safety is a primary consideration in the provision of all care.

5.3 Discuss the role of the patient/family in ensuring safe care provision by notifying health care professionals of any concerns or questions regarding the infusion
line(s)/therapy(-ies), for example, when an infusion line becomes disconnected or the infusion pump starts beeping.

5.4 If the patient will be discharged with infusion lines insitu, discuss the implications for care, potential complications, and how to access services in the event of a complication.

DEFINITIONS

**Family** means one or more individuals identified by the patient as an important support and who the patient wishes to be included in any encounters with the health care system, including, but not limited to, family members, legal guardians, friends, and informal caregivers.

**Health care professional** means an individual who is a member of a regulated health discipline, as defined by the *Health Disciplines Act* or the *Health Professions Act*, and who practises within scope or role.

**Patient** means an adult or child who receives or has requested health care or services from Alberta Health Services and its health care providers or individuals authorized to act on behalf of Alberta Health Services. This term is inclusive of residents, clients and outpatients.

REFERENCES

- Alberta Health Services Governance Documents:
  - *Falls, Entanglement, Strangulation, and Entrapment (F-ESE) Assessment Tool* (http://insite.albertahealthservices.ca/15309.asp)
  - *Independent Double Check Policy* (PS-60-01)
  - *Medical Tubing Entanglement: Prevention Strategies and Interventions for the Pediatric Patient Guideline* (PS-89-01)

VERSION HISTORY

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