FIRELANDSHEALTH Firelands Regional Medical Center	**Title:** IV INFILTRATION/EXTRAVASATION- PROTOCOL AND PROCEDURE	**ID #:** NSG.109.60 **Effective:** 3/11 **Page:** 1 of 4
	STANDARD POLICY AND PROCEDURE FORM	

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	Reviewed: 10/15, 3/20, 5/22

PROTOCOL: IV INFILTRATION/EXTRAVASATION

Purpose: To provide guidelines for interventions for IV infiltrates.
Note: A physician's order is required for medical intervention.

For chemotherapeutic agents see Antineoplastic Vesicant/ Irritant Infiltration/ Extravasation in the Medical/Oncology/Cancer Center Unit Specific Policy and Procedures Manual.

Definitions: Infiltration - The process whereby a fluid passes into the tissues.

Extravasation - The escape of caustic fluids/medications from its physiologic contained space, e.g., vein, artery into the surrounding tissue.

Vesicant Drug - Agents that if deposited into the subcutaneous tissue cause tissue necrosis and damage to underlying tendons, nerves, and blood vessels.

Cytotoxic Drug - Any pharmacologic compound that inhibits the proliferation of cells within the body. Such compounds are designed to destroy abnormal cells selectively while sparing as many normal cells as possible.

Pin Cushion Technique - This technique involves infiltrating a small amount of antidote (0.2-0.4mls) around the extravasated site with a small needle (25-26 gauge). Thinking of the extravasated site as a clock face, injections are made at 2 hour intervals subcutaneously towards the center of the clock. The procedure is painful and additional pain management should be considered by the physician.

PROCEDURE: IV INFILTRATION/EXTRAVASATION

A. Recognize and document the signs and symptoms of IV infiltration:
   1. Edema around insertion site
   2. Swelling of cannulated extremity
   3. Blanching of infusion site
   4. Coolness of skin around site
   5. No backflow of blood when tubing is pinched or fluid container lowered below IV site (tubing must be removed from infusion device).

B. Recognize and document the signs and symptoms of IV extravasation:
   1. Pain at site
   2. Stinging at site

3. Burning at site
4. Redness at site
5. Swelling at site

C. To check for extravasation, place constrictive band proximal to infusion site tight enough to restrict blood flow through the vein. Set tubing roller clamp to a “keep open” rate and remove tubing from infusion pump. If the infusion continues to drop, fluid is extravasating into the surrounding tissue.

D. Stop infusion.

E. Leave catheter in place until determined it is no longer needed (antidote administration).

F. Attempt to aspirate the drug should signs and symptoms present.

G. Refer to attached *Extravasation Guide for Non-Cytotoxic IVs* for appropriate compress application (warm or cold). Compresses are to be applied to the affected area 3-4 times during the day. In situations where multiple medications have infiltrated in the same line, conflicting compress application will be left to the physician’s discretion.

H. It is recognized that extravasation can occur with any injectable drug. This may be the case for extravasations that do not present with serious adverse symptoms. Notify Pharmacy to see if antidote is required. Pharmacy is available 24/7.

I. Notify physician if antidote required. Send order as “stat” to Pharmacy. Antidote will be sent directly to the nursing unit.

J. Document description of IV site, time infusion stopped, amount of fluid infiltrated/extravasated, notification of physician, orders received, if any, interventions instituted, and time IV catheter removed.

References:

Smith, S.F., Duell, D., Martin, B.C., Abersold, M.L, Gonzalez, L. (2017). Clinical Nursing skills: Basic to advance skills. New Jersey: Pearson

Hadaway L. (2007). Infiltration and extravasation: preventing a complication of IV catheterization. American Journal of Nursing, 107 (8), p.64-72.

Dynamic Health Administering Vesicant Chemotherapy. INS Standards 8th Edition Standards 47 p.142-149

EXTRAVASATION GUIDE FOR NON-CYTOTOXIC IVs

Acyclovir C	Diazepam C	Norepinephrine W
Aminophylline W	Digoxin C	Parenteral Nutrition W
Amiodarone C	Dobutamine W	Phenobarbitone C
Amphotericin C	Dopamine W	Phentolamine C
Arsenic W	Epinephrine W	Phenylephrine C
Beta Interferons W	Erythromycin C	Phenytoin W
Calcium Chloride W	Fluorescein C	Potassium Chloride (>40mmol/l) W
Calcium Gluconate W	Foscarnet C	Promethazine C
Cefotzxime C	Ganciclovir C	Sodium Bicarbonate W
Clarithromycin C	Magnesium Sulfate C	Vancomycin C
Dextrose >10% C	Mannitol C	Vasopressin C
Diazemuls C	Methotrexate W	Venofer C

W – Warm compress application
C – Cold compress application