

# Cincinnati Pediatric Intravenous Extravasation Assessment System

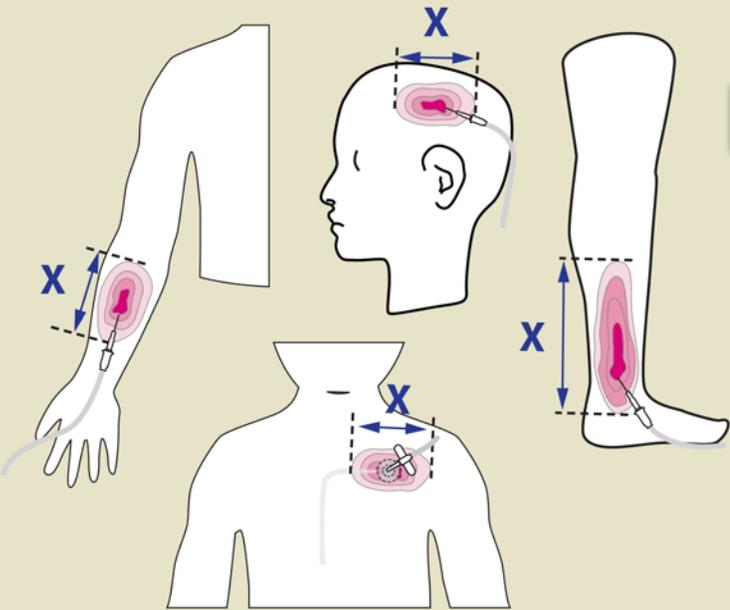


## STEP 1:

### Assess Extravasation

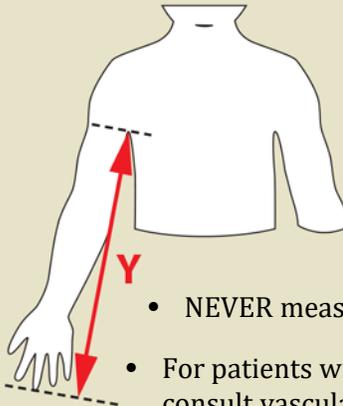
## Volume

#### STEP 1a: Measure Swelling



- Notes:**
- Define edges of swelling by palpation/visual observation.
  - Measure longest dimension.

#### STEP 1b: Measure ARM Length



**Y** = Axilla to tip of longest finger

- For **Y** measure arm length regardless of site of extravasation.
- NEVER measure leg or other body part.
- For patients with casts or limb deficiency, consult vascular access team.
- Arm length **Y** is just a convenient way to consistently estimate the patient's size. For **Y** never measure the leg or other body part.

#### STEP 1c: Calculate

$$\left( \frac{X}{Y} \right) \cdot 100 = \square \%$$

## STEP 2:

### Assess Extravasated

## Medication

#### Venous Infusion Extravasation Risk

This is an estimate of risk for phlebitis or local tissue injury due to extravasation from any intravenous infusion device. Risk derived from available evidence, CCHMC data and CCHMC expert opinion, subject to review and change as further evidence becomes available. For Treatment of Extravasation, Refer to CCHMC Policy P&T II-112. This does not apply in situations of emergency medical treatment. If a medication is not on this list, please refer to the CCHMC formulary or contact pharmacy (6-4291) for information

Red Higher Risk	Yellow Intermediate Risk	Green + Lower Risk
Acyclovir Amiodarone Caffeine Citrate Calcium (all salt forms) Dextrose > 12.5% Doxycycline Esmolol Mannitol 20% & 25% Promethazine Potassium >60 mEq/L Sodium bicarbonate ≥ 3% Sodium chloride ≥ 3% TPN > 950 mOsm/L Vasopressors such as Dopamine  Antineoplastic Medications Extravasation treatment: Refer to the Hazardous Medication Procedure HM-Pro-003 & HM-Pro-006	Acetazolamide Allopurinol Amikacin Amphotericin B (conventional) Arginine Ciprofloxacin Dextrose 10% to ≤12.5% Diazepam Erythromycin Ganciclovir Lorazepam Midazolam Morphine Ondansetron Nafcillin Iodine based (CT) Radiology Contrast Phenobarbital Phenytoin Potassium ≤ 60 mEq/L TPN ≤950 mOsm/L Vancomycin	Aminophylline Amphotericin B Liposomal Ampicillin Ampicillin/Sulbactam Cefazolin Cefotaxime Cefazidime Ceftriaxone Cefuroxime Clindamycin D5LR Dextrose < 10% Fentanyl Fosphenytoin Furosemide Gadolinium Based (MRI) Contrast Gentamicin Heparin Imipenem IVIG Lactated Ringers Lipids Magnesium sulfate (bolus) Mercapenem Methylprednisolone Normal saline Pentamidine Piperacillin  NOTE: No intravenous infusate is "safe". Gross extravasation, even of normal saline, may result in serious harm including compartment syndrome, causing ischemia and loss of tissue or permanent loss of limb function. Piperacillin/tazobactam Ticarcillin Ticarcillin/clavulanate Tobramycin

**Notes:**

- "Extravasated Medication" means medication administered through the IV/CVC during the previous 2 hours, or since the last normal IV/CVC site check, whichever is longer.
- Refer to current Red/Yellow/Green listing (each new version has a different color border, consult latest version)

**EXTRAVASATION MEDICATION CODING**

- R = medication on RED list
- Y = medication on YELLOW list
- G = medication on GREEN list
- F = Fluids only (no medications or potassium)
- U = medication Unlisted
- N = medication not listed but causing harm similar to a RED drug (this category will rarely be needed)

Reviewed: August 9, 2019  
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## STEP 3:

### Chart immediately in EPIC

Notify Vascular Access Team as soon as possible if:

**Volume ≥ 30%**

**and/or RED list Medication**

**Vascular Access Team Pager:**

**736-0337**

