February 2026

Patient Safety Alert
IV Tubing Line Leaks

This quality improvement information is shared to support safe care and prevent incidents in the future and is confidential within Nova Scotia Health as per the Quality-improvement Information Protection Act - QIIPA.

Issue reported:

Through review of our SIMS patient safety incident reporting, we have recently identified a significant **increase in IV-line tubing leaks** incidents, particularly involving the **Fresenius Kabi (FK) IV-line tubing**, which is used throughout Nova Scotia Health.

IV line leaks are patient safety incidents that may interrupt, or delay required therapy, cause medication loss, and pose occupational risks to staff. Depending on the medication, they may also result in hazardous drug exposure. All such incidents should be reported in SIMS to support learning and system improvements for patient safety.

We ask all team members when setting up IV tubing in preparation for medication delivery to:

1. Inspect all IV tubing before using looking for any cracks, breaks, kinks, or holes. Leaks have been noted at the Y-joint, pumping segment, port and joint as well as physical defects to the tubing.
2. Observe IV tubing once medication/fluid has begun flowing and regularly while medication is infusing.

When these incidents occur, please:

- Notify your Clinical Practice Lead, Charge, Lead, or Manager as appropriate
- Save packaging and lot numbers; take photos if able
- Securely package and send the set/leaking products to Clinical Engineering for testing and investigation
    - If Clinical Engineering is not at your site, you may mail the item directly to VG Clinical Engineering at 1276 South Park St, Halifax, NS B3H 2Y9, Dickson Building, Room 1025B Clinical Engineering.
    - If the line contains cytotoxic material, please ensure it is double bagged in biohazard bags, placed in a leakproof container, and labeled on the outermost package with a cytotoxic label (pharmacy team can assist).
- Report in SIMS, select “yes” for Equipment Involved/Malfunctioned. This triggers review by the NSH FK Incidents Working Group and Clinical Engineering, entry into the NSH product incident tracking Smartsheet, and initiates investigation and reporting to Health Canada where applicable.

Your identification and reporting of these incidents help to:

- Support Clinical Engineering and Supply Chain in identify issues with the IV lines and coordinating communication with the manufacturer and Health Canada to support timely resolution
- Prevent future patient safety incidents and equipment failures
- Improve patient safety
- Support system-wide quality improvement

Your patient safety reports have resulted in learning and identification of future improvements!