

Intravenous Tubing Changes

PURPOSE

To prevent or minimize infection related to the intravenous delivery system.

POLICY

1. When appropriate, the RN shall instruct the patient or caregiver in this procedure.
2. Intravenous tubing shall be changed using aseptic technique.
3. The system shall be maintained as a closed system whenever possible.
4. All tubing shall be of luer-lock design.
5. Anti-free flow tubing shall be considered whenever possible.
6. All tubing shall be changed immediately upon suspected contamination or when the integrity of the product or system is compromised.
7. Add-on devices used as part of the administration set, such as single- and multi-lumen extension sets and filters, shall be changed at the same time as the administration set.
8. **For the purposes of discussing administration set changes, the following definitions apply:**
 - a. **CONTINUOUS** infusion is one where *the tubing is not disconnected from the patient (injection cap)*. If the drug is administered per intermittent mode on a pump, the infusion is still considered continuous. Bag changes alone do not affect this definition.
 - b. **INTERMITTENT** infusion is one where *the tubing is disconnected from the patient (at the injection cap)*.
9. Primary and secondary CONTINUOUS sets shall be changed every 96 hours and immediately upon suspected contamination.
10. Primary INTERMITTENT sets shall be changed every 24 hours, or with each infusion. To re-use the tubing for additional infusions within the 24-hour time period, the end of the tubing should be covered with a compatible sterile covering device.
11. Administration sets used for parenteral nutrition shall be changed every 24 hours.
12. Administration sets used for blood and blood components should be specific to blood transfusion and include a filter; the administration sets should be replaced every 4 hours.

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13. Tubing used with medications exhibiting known degradation characteristics that could cause patient harm should be changed at a frequency that will prevent degraded products from infusing.

Example: Amphotericin B Lipid Complex (Abelcet®) has a room temperature stability of 6 hours and the dose is administered every 24 hours. In this situation the tubing must be discarded after every dose, and a new infusion set used with the next dose.

14. When using extended use filters (48° Davol or 96° PALL) in a closed system, tubing shall be changed at the time of filter change. Whenever possible, bag/cassette change should coincide to maintain integrity of the system.
15. A vented administration set shall be used for solutions supplied in glass or semi-rigid containers, and a non-vented administration set shall be used for plastic fluid containers.

RESPONSIBILITY

The Clinical Specialist has the responsibility for approval of, compliance with, and revisions to this policy.

MODIFICATION/REVISION

This policy is subject to modification or revision in part or its entirety to reflect changes in conditions subsequent to the effective date of this policy.

REFERENCES

1. Infusion Nursing Standards of Practice – Revised 2016; Journal of Infusion Nursing, Supplement to January/February 2016, Volume 39, Number 1S.
2. Infusion Nursing: An Evidence-Based Approach, Third Edition edited by Mary Alexander, Ann Corrigan, Lisa Gorski, Judy Hankins, and Roxanne Perucca.
3. INS (Infusion Nurses Society) Policies and Procedures for Infusion Nursing, 3rd Edition.