1. PURPOSE
To ensure a consistent standardized practice for all saline lock initiations.

2. EQUIPMENT / SPECIAL INSTRUCTIONS
- alcohol swab
- saline lock
- syringe(s) and normal saline for priming and flushing
- intravenous (IV) catheter
- tourniquet
- adhesive tape
- 2x2 dressing
- transparent dressing
- sharps container
- razor

A. If resistance is met, do not force the catheter. Remove the catheter and needle together applying pressure to the puncture site with a 2x2 dressing. Attempt venipuncture at another site proximal to the failed site using another sterile catheter. Never reinsert needle into catheter.

B. For patient comfort, consider applying a thin layer of tape or a 2x2 dressing between their skin and the hub of the saline lock.

3. PROCEDURE
1. Ensure that the patient qualifies for saline lock initiation, or contact a Base Hospital Physician (BHP) for further direction.

2. Communicate the need for the saline lock and its effects to the patient/family member whenever possible.

3. Select insertion site, in order of preference/availability
   - Peripheral upper extremity
   - Lower limb access (in unconscious patients or in arrest situations)

4. Apply tourniquet 4" to 8" above insertion site with enough pressure to stop venous return.

5. Remove the saline lock from its packaging and inject normal saline through the lock to fill the system.

6. Cleanse the site in a circular manner at least 5 cm in diameter with an alcohol swab. Allow skin to dry. If necessary, shave the site.
7. Remove needle protector cap. Examine catheter tip. If there are any imperfections, discard the needle.

8. Stabilize the vein by applying pressure and tension distal to the point of entry. With the bevel of the needle up, pass through the skin and into the vein from the side or directly on top. Advance the needle and catheter about 2 mm beyond the point where blood return in the hub was first encountered. Slide the catheter over the needle and into the vein. Apply pressure to the proximal end of the catheter to stop escaping blood (if applicable). While stabilizing the catheter, release the tourniquet and withdraw the needle and safely dispose.

9. Screw the saline lock over the female end of the catheter and flush with 3-5 cc’s of normal saline to ensure it is patent. If the type of saline lock being utilized does not include a positive displacement device, withdraw the syringe after flushing with 3 cc of normal saline while continuing to apply positive pressure.

10. Apply a transparent dressing to the insertion site then apply tape up to, but not over the connector of the lock. Avoid placing tape over transparent dressing.

11. Discontinue if complication occur, or as directed by BHP. Potential complications include:
   - hematoma
   - nerve/tendon/muscle damage
   - thrombophlebitis
   - infiltration

12. Document the procedure on the patient care record as per the Ministry of Health and Long Term Care Emergency Health Services Branch Ambulance Call Report Documentation Standards and your Service Provider policy which includes:
   - size of the catheter
   - site of IV initiation
   - time of attempt
   - associated equipment used
   - fluid balance

13. Document patient condition before and after saline lock initiation.

4. POLICY/PROCEDURE UPDATE SCHEDULE
   To be reviewed annually.

5. REFERENCES AND RELATED POLICIES
   - ALS PCS Nov. 2013 Version 3.1
### 6. CONSULTATION AND APPROVAL

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<thead>
<tr>
<th>Policy Owner</th>
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<tbody>
<tr>
<td>Paramedic Practice Coordinator</td>
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<td><strong>Committee/Stakeholder Consultation</strong></td>
<td><strong>Date</strong></td>
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<tr>
<td>CPC Quality of Care Committee</td>
<td>September 17, 2014</td>
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<td>CPC Program Committee</td>
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<td><strong>Approval:</strong></td>
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