



UTSW/Parkland BioTel EMS ALERT

January 3, 2018

EMS ALERT 18-002 **Normal Saline & Administration of IV Fluids**

Purpose:

To advise BioTel EMS Providers of updated recommendations regarding IV fluid administration.

Background:

Nationwide shortages and inventory depletion severely limit vendor capabilities to fulfill orders for Normal Saline (NS) used for IV/IO administration. Options to alleviate this shortage are being investigated. There is no indication, however, of when the shortage may end.

Medical Director Interim Recommendations, Effective Immediately and Until Further Notice:

1. Routine use of IV NS shall be reserved for patients who require urgent fluid resuscitation.
2. The need for urgent fluid resuscitation shall be defined as:
 - a. ADULTS at least 14 years of age:
 - i. Heart rate greater than 100 bpm; OR
 - ii. SBP less than 100 mmHg; OR
 - iii. Clinical signs of sepsis, shock or hypoperfusion; OR
 - iv. Any patient for whom the paramedic or BioTel staff determines that urgent fluid resuscitation is appropriate.
 - b. PEDIATRIC patients less than 14 years of age:
 - i. As above, using age-appropriate vital signs per current [BioTel Treatment Guidelines](#);
 - ii. NOTE: Recall that hypotension is a late, ominous sign of pediatric shock.
3. Most patients whose vital signs and clinical presentation do not suggest the presence of sepsis, shock or hypoperfusion do not require routine, urgent fluid resuscitation.
4. Paramedics shall continue to obtain peripheral IV access for medications, per standing orders.
5. Medications will be flushed with prefilled saline syringes.
6. Do not hang IV fluids to “keep vein open” – use a saline lock.
7. Do not prepare pre-spiked IV fluid bags at the start of a shift or before arriving at the scene.
8. Intraosseous (IO) cannulas will require the use of NS to maintain patency:
 - a. As such, the IV route generally will be preferred under most circumstances.

Summary:

- Until further notice, routine administration of IV fluids shall be reserved for patients who require urgent fluid resuscitation.
- IV medications shall be flushed with a prefilled saline syringe.
- IV catheter patency at “keep vein open” rate shall be maintained with a saline lock, not an IV fluid bag.

- ***UTSW/Parkland BioTel EMS Providers may contact BioTel or the [EMS Medical Direction Team](#) at any time with questions or concerns about this EMS Alert***