Fluid resuscitation algorithm for adults with sepsis

**Hypotension:**
SBP < 90mmHg or > 40mmHg drop from baseline or
MAP < 65mmHg

**OR**

**Hypoperfusion:**
Tachycardia
Vasoconstriction
Oligouria
Lactate ≥ 2mmol/L

Give bolus 500mls isotonic crystalloid over 15 minutes and reassess
Give patients who present with hypotension a minimum of 30mls/kg in the 1st hour, unless fluid intolerant

**Hypovolaemia:**
- Altered mental state
- Hypotension
- Hypoperfused
  - tachycardia
  - cold mottled peripheries
  - prolonged capillary refill
- Oligouria
- Raised lactate

15-minute reviews and continuous monitoring

**Fluid overloaded:**
- Increasing respiratory rate
- Decreasing O₂ saturations
- JVP distension
- New onset crepitations
- New onset discomfort
  lying flat

30mls/kg IVT administered

**Normotensive**
+ Repeat Lactate < 2mmol/L

- Stop all IVT
- Consider diuretic
- NIV or intubation as indicated
- Continuous monitoring

**Hypotensive**
or Repeat Lactate ≥ 2mmol/L

- Stop all IVT
- Vasopressors
- NIV or intubation as indicated
- **Not** for diuretic
- Continuous monitoring
- **Call Critical Care**

**Hypotensive**
or Repeat Lactate ≥ 4mmol/L

- **High mortality risk**
- Continue fluid resuscitation as above
- Consider Vasopressors
- Continuous monitoring
- **Call Critical Care**

**Normotensive**
+ Repeat Lactate < 4mmol/L

- Continue fluid resuscitation as above until Lactate < 2mmol/L as tolerated, then stop
- 1/2-hourly observations
- Reassess and treat if hypoperfusion / hypotension reoccurs

Exercise professional judgement – if patient co-morbidity indicates use 250ml boluses and reassess more frequently.

SBP: Systolic blood pressure, MAP: Mean arterial pressure, JVP: Jugular venous pressure, IVT: Intravenous therapy, NIV: Noninvasive ventilation

For more information on National Clinical Guideline No 6. Sepsis Management go to: www.hse.ie/sepsis