## Formulas for calculators:

### Fluids calculator:

## **INTRAVENOUS FLUIDS AND ELECTROLYTES**

- 1. This guideline is applicable to pediatric patients older than 28 days.
- 2. Maintenance fluids per day should be calculated using the "100, 50, 20" rule (also known as the Holliday Segar rule). We sometimes use the "4, 2, 1" rule where the calculation is per hour rather than per day. Maximum fluid volume per day for larger children is 2500 ml.

100ml/kg/day for the 1 <sup>st</sup> 10kg	4ml/kg/hr for the 1st 10kg
50ml/kg/day for the 2 <sup>nd</sup> 10kg	2ml/kg/hr for the 2 <sup>nd</sup> 10kg
20 ml/kg/day for every kg thereafter	1ml/kg/hr for every kg thereafter

## **Normal Urine Output**

Neonates >0.5 ml/kg/h

Infants and above >1 ml/kg/h

## Systolic BP

# **Expected Systolic Blood Pressure**

<1month of age: SBP >60 mmHg

1month to 1 year: SBP >70 mmHg

1 to 10 years:

 $SBP > 70 + (age in years \times 2) mmHg$ 

**Parkland Formula**Volume replacement (2nd/3rd degree burns):
In first 24 hours, total volume = 3–4 ml/kg per % BSA burn
Give half over first 8 hours after burn, half over the next 16 hours.