

# Fluid Resuscitation Calculation Sheet for the Adult Burn Patient > 30 kg

## Burn Disaster Crisis Standards of Care

### Fluid Resuscitation Formulas

**Body surface area calculation equals (m<sup>2</sup>):**

3600

#### Fluid resuscitation calculation

4 ml x weight (kg) x Burn Area (%TBSA)

#### Basal Fluid Requirement.

1500 ml / 24 hours x Body Surface Area

### 1. Fluid Resuscitation and Basal Requirement

Calculated fluid resuscitation and basal requirement

A.  $(4\text{ml} \times \text{_____ kg} \times \text{_____ \%TBSA}) + (1500 \text{ ml} \times \text{_____ m}^2) = \text{_____ ml} / 24 \text{ hours}$

B. Resuscitation Fluid for the First 24 Hours

Give half the calculated volume in the first 8 hours. Then the other half in the next 16 hours.

i. 1<sup>st</sup> 8 hours = \_\_\_\_\_ ml = \_\_\_\_\_ ml/hr

ii. 2<sup>nd</sup> 8 hours = \_\_\_\_\_ ml = \_\_\_\_\_ ml/hr

iii. 3<sup>rd</sup> 8 hours = \_\_\_\_\_ ml = \_\_\_\_\_ ml/hr

The resuscitation fluid will be titrated hourly based on the patients urine output until the calculated maintenance rate goal is reached. **See fluid resuscitation order sheet for the burn patient >30 kg**

### 2. Maintenance fluids = Basal Fluid Requirement and Evaporative Water Loss

A. Basal Fluid Requirement =  $1500\text{ml} \times \text{_____ m}^2$

i. Total body surface area \_\_\_\_\_ m<sup>2</sup>

ii. 24 hours = \_\_\_\_\_ ml

iii. Hourly rate = \_\_\_\_\_ ml/hr

B. Evaporative Water Loss

Burn Patient > 30kg =  $(25 + \%TBSA) \times \text{_____ m}^2 = \text{ml/hr}$

i. Calculated evaporative water loss

$(25 + \text{_____ \%TBSA}) \times \text{_____ m}^2 = \text{_____ ml/hr}$

$= \text{_____ ml} / 24 \text{ hrs}$

ii. **Total maintenance fluids** including basal requirement and evaporative water loss

1. **24 hours** = \_\_\_\_\_ ml

2. **Hourly rate** = \_\_\_\_\_ ml/hr