

# DKA Intravenous Fluids Calculations

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Age: \_\_\_\_\_

- Must discuss admission & ongoing care with senior on-call medical staff.
- Use Current Measured Weight & Clinic Weight whenever possible.
- Use 10 ml/kg resuscitation bolus. Repeat once if necessary, over 1-2 hrs.
- If further resusc. volume thought necessary (to max. total 30 ml/kg) this must be discussed with on-call ED consultant (DKA signs mimic fluid loss).

Surname: \_\_\_\_\_  
 Forename: \_\_\_\_\_  
 DOB: \_\_\_\_\_  
 HN: \_\_\_\_\_  
 CHI: \_\_\_\_\_

Complete electronically or print first - you cannot save form on computer

click here to start entering data and move between fields with Tab key.

A. Current Weight: Measured on Emergency Department arrival (kg):  A Current Wt (kg)

B. % Dehydration: DKA Severity Bicarb (mmol/l) % Dehydration  B Dehydration (%)

Mild	> 10	3
Moderate	5 - 10	6
Severe	< 5	10

C. True Weight: Pre-dehydration weight (if known) (if available from a recent clinic: See Magistral \*)  C True Weight (kg)

Est. True Weight: (using % dehydration)

$$100 \times \frac{A}{100 - B} = \frac{100 \times A}{100 - B} = \text{[ ]}$$

Only use if approx. recent clinic weight NOT available.

$C \times 0.1$

D. Weight Lost:  D Weight Lost (kg)

E. Maint. Fluid Volume: Age (yrs) ml/kg over 48hrs  E Maint. Fluid Vol. (ml/kg/48hr)

Over 48 hours:	0 - 2	→	160
	3 - 5	→	140
	6 - 9	→	120
	10 - 14	→	100
	> 14	→	60

Select ml/kg per 48 hrs according to age (e.g. 160, 140, 120, 100, or 60)

If you have a pre-hydration weight, type it over the default value and press Tab. Otherwise, delete the default value and press Tab

## IV Fluid Rate Calculation

MAINTENANCE  C True Weight (kg) (Pre-dehydration) x  E Maint. Vol over 48 hrs (ml/kg/48 hrs) =  C x E Maintenance (ml/48 hrs)

DEFICIT  D Weight Lost (kg) x 1000 (ml/kg) =  D x 1000 Deficit (ml)

IV Fluids Start Time: \_\_\_\_\_

IV Insulin Start Time: \_\_\_\_\_ (1-2 hrs after IV Fluid Start)

Subtotal 1 (ml/48 hrs)

Calculated by: (Sign) \_\_\_\_\_

(Print) \_\_\_\_\_

RESUSCITATION Total Resusc. Fluid Volume (ml)  Resusc. Resuscitation (ml)

Checked by: (Sign) \_\_\_\_\_

(Print) \_\_\_\_\_

Subtotal 2 (ml/48 hrs)  Subtotal 2

(hrs)  $\div 48$

\* Magistral Clinical: <http://ykh-ae:8889/forms90/html>  
 UserName:diabro / Password & Database: obtain from ED staff  
 Read-only access to Magistral Diabetes Clinical Database:  
 access to clinic records - last HbA1c, clinic wt, comments, etc.

Please Note: If you complete manually there will be small rounding errors but these are of no clinical significance

**INFUSION RATE** (ml/hr)