

# Acute renal failure in a child

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**Minimum urine output**  
 >1ml/kg/hour in children  
 >2ml/kg/hr in infants

**Measure Fe Na% (=u/p sodium x p/u creatinine x 100)**

<1% pre-renal

>2% renal

**Shock usual**  
**Urgent rehydration**  
 20ml/kg 0.9% saline IV

**Repeat x 1 if necessary**

**Correct fluid deficit**  
 with 0.9% saline over 2-4 hours

**Furosemide 2mg/kg IV**

If BP still low -  
**inotropes**

**Try Furosemide 2mg/kg IV**

**Measure all intake and losses**

**Calculate insensible loss and increase by 50% if hot climate**

**Add all losses to insensible loss and give total fluid containing as many calories as possible**

**Weigh twice daily**  
**Observe for oedema and heart failure**

**Diet: Limit protein intake 1g/kg/day**  
 Give calories as carbohydrate and fat  
 Restrict salt intake  
 Restrict phosphate intake  
 Avoid potassium in diet  
 Add calcium carbonate orally 0.5-2g with each meal

**Monitor BP regularly**

**Adjust drug doses**  
 Do not use nephrotoxic drugs

Watch for hypoglycaemia

**Sodium bicarbonate 1mmol/kg/day to prevent acidosis**

300ml/m<sup>2</sup>/24 hours  
 or 12ml/kg/24 hours >1yr  
 15ml/kg/24 hours infant  
 24ml/kg/24 hours if preterm infant