

**NAC is a sulfhydryl donor used to treat paracetamol toxicity. It is almost completely hepato-protective if commenced within 8 hours of paracetamol OD.**

**Toxicological indications:** See separate guidelines for paracetamol overdose

**Dose and Administration (AUSTIN HOSPITAL - 2 infusion regimen)**

*- Use pre-formatted NAC administration chart stored in ED drug room*

**Adults:**

INFUSION 1: 200 mg/kg NAC in 500 mL 5% dextrose over 4 hours

INFUSION 2: 100 mg/kg NAC in 1000 mL 5% dextrose over 16 hours

**Children ≤ 20 kg body weight:**

INFUSION 1: 200 mg/kg in 7mL/kg of 0.9% sodium chloride + 5% dextrose over 4 hours

INFUSION 2: 100 mg/kg in 14 mL/kg of 0.9% sodium chloride + 5% dextrose over 16 hours

**Children > 20 kg body weight:**

INFUSION 1: 200 mg/kg in 250 mL of 0.9% sodium chloride + 5% dextrose over 4 hours

INFUSION 2: 100 mg/kg in 500 mL of 0.9% sodium chloride + 5% dextrose over 16 hours

**Dose and Administration – Standard Guidelines (3 infusion regimen)**

**Adults:**

INFUSION 1: 150 mg/kg NAC in 200 mL 5% dextrose over 1 hour

INFUSION 2: 50 mg/kg NAC in 500 mL 5% dextrose over 4 hours

INFUSION 3: 100 mg/kg NAC in 1000 mL 5% dextrose over 16 hours

**Children ≤ 20 kg body weight:**

INFUSION 1: 150 mg/kg in 3 mL/kg of 0.9% sodium chloride + 5% dextrose over 1 hour

INFUSION 2: 50 mg/kg in 7 mL/kg of 0.9% sodium chloride + 5% dextrose over 4 hours

INFUSION 3: 100 mg/kg in 14 mL/kg of 0.9% sodium chloride + 5% dextrose over 16 hours

**Children > 20 kg body weight:**

INFUSION 1: 150 mg/kg in 100 mL of 0.9% sodium chloride + 5% dextrose over 1 hour

INFUSION 2: 50 mg/kg in 250 mL of 0.9% sodium chloride + 5% dextrose over 4 hours

INFUSION 3: 100 mg/kg in 500 mL of 0.9% sodium chloride + 5% dextrose over 16 hours

**Contra-indications:** Previous significant anaphylactoid reaction (discuss with clinical toxicologist)

**Pregnancy:** NAC should be administered to pregnant patients if indicated following paracetamol overdose.

**Adverse effects:** *(Cease infusion if reaction is severe and discuss with clinical toxicologist)*

- Anaphylactoid reactions (incidence 10-47%) – usually mild, but may be severe - mild hypotension / flushing / rash / angioedema/ bronchospasm
- Usually occur in association with Infusion 1. Cease infusion. Treat along conventional lines.
- When symptoms resettle, start at ½ rate and slowly increase to full rate over 30 minutes.