

N-ACETYLCYSTEINE - DILUTE

FOR ACETAMINOPHEN TOXICITY

ORDER: 140 MG/KG LOADING DOSE ONCE

70 MG/KG DOSAGE Q6H X 7 TREATMENTS

WEIGHT: 30 KG

RATE: X

FLUIDS: Y

TIME: 20 MINS – GIVE SLOW IV

CONC: 20% = 200 MG/ML, DILUTE TO 5% = 50 MG/ML
BY DILUTING 1:3 WITH 0.45% NaCl, STERILE H2O OR D5W
AND USE A 0.22 MICRON FILTER AT PORT CLOSEST TO
PATIENT

LOADING DOSE:

$140 \text{ MG/KG} \times 30 \text{ KG} = 4200 \text{ MG}$

$4200 \text{ MG} / 200 \text{ MG/ML} = 21 \text{ ML NAC}$

LOADING DOSE DILUTION:

21 ML NAC 1:3 IN 0.45% NaCl, STERILE H2O OR D5W

REMEMBER 1:3 IS 4 TOTAL PARTS

$21 \text{ ML} \times 4 = 84 \text{ ML TOTAL VOLUME} - 4 \text{ PARTS}$

- 21 ML NAC – 1 PART

63 ML 0.45% NaCl, STERILE H2O OR D5W –
3 PARTS = FLUIDS = Y

60 ~~MIN~~ / 20 ~~MIN~~ = 3 *THIS IS A UNIT OF TIME SO YOU WILL GET A RATE IN ML/HR WHEN CALCULATING

$$105 \text{ ML} \times 3 = 315 \text{ ML/HR} = \text{RATE} = X$$

ADDITIONAL DOSES:

$$70 \text{ MG/KG} \times 30 \text{ KG} = 2100 \text{ MG}$$

$$2100 \text{ MG} / 200 \text{ MG/ML} = 10.5 \text{ ML NAC}$$

$$10.5 \text{ ML} \times 4 = 42 \text{ ML TOTAL VOLUME} - 4 \text{ PARTS}$$

$$\underline{- 10.5 \text{ ML NAC}} - 1 \text{ PART}$$

$$31.5 \text{ ML } 0.45\% \text{ NaCl, STERILE H}_2\text{O OR D5W} \\ - 3 \text{ PARTS} = \text{FLUIDS} = Y$$

$$60 \text{ ~~MIN~~ / 20 ~~MIN~~ = 3$$

$$52.5 \text{ ML} \times 3 = 157.5 \text{ ML/HR} = \text{RATE} = X$$

NOTE: N-ACETYLCYSTEINE CONTAINS SODIUM AND TO PREVENT EXCESS SODIUM AND FLUID CREEP OVER THE COURSE OF HOSPITALIZATION IT IS RECOMMENDED NOT TO DILUTE WITH 0.9% NaCl BUT RATHER 0.45% NaCl, STERILE H₂O or D5W.