



Poison HOTLINE

1-800-222-1222

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Did you know

The FDA has increasing concerns about methanol in hand sanitizers. Methanol is a toxic alcohol that causes blindness and death. Poison centers are being consulted about cases of methanol poisoning from exposure to hand sanitizers that are known or suspected to contain methanol.

Some of the recalled products contained both methanol and ethanol, making the situation less clear when a patient has a detectable ethanol level. A detectable ethanol level does not rule out a possible methanol exposure. In mixed exposures, the methanol metabolism will only be temporarily blocked until the ethanol is metabolized.

Call **1-800-222-1222** to report an exposure to any hand sanitizer.

Use of High Dose N-acetylcysteine

Acetaminophen (APAP) overdoses leads to hepatic and renal toxicity. Treatment of APAP toxicity is aimed at replenishing the glutathione supply by providing the precursor molecule cysteine in the form of N-acetylcysteine (NAC). The IV NAC dosing published in the 1970's was based on a patient weight of 70 kg with "normal" sized liver who had ingested approximately 16 grams of APAP.

Studies have shown patients large APAP ingestions have an increased risk of hepatotoxicity and coagulopathy. The risk begins to increase when the APAP concentration plots above the 300 mcg/mL line (the "300-Line") on the Rumack-Matthew Nomogram. The risk of hepatotoxicity and coagulopathy increases incrementally as APAP levels rise above the 450 mcg/mL and the 600 mcg/mL lines on the nomogram.

The 300-Line on the R-M Nomogram starts at 300 mcg/mL at 4 hours post ingestion and declines with a 4-hour half-life. This line is parallel to the nomogram's straight line that connects 150 mcg/mL at 4 hours, 37.5 mcg/mL at 12 hours and 4.69 mcg/mL at 24 hours (the "150-Line"). The 450-Line and 600-Line start at 450 mcg/mL and 600 mcg/mL at 4 hours post ingestion, respectively, and decline with a 4-hour half-life.

With the need for an increased NAC dose in massive APAP ingestions, the following modified IV NAC dosing has been proposed for the third infusion. The first two infusions (150 mg/kg over 1 hour and 50 mg/kg over 4 hours) remain the same.

Line on the R-M Nomogram where the APAP level plots	3 rd infusion of IV NAC infused over 16 hours	IV NAC dose in mg/kg/hr
600 mcg/ml and up	400 mg/kg	25
450-599 mcg/ml	300 mg/kg	18.75
300-449 mcg/ml	200 mg/kg	12.5
150-299 mcg/ml	100 mg/kg	6.25

After the 21-hour IV NAC course is complete, check APAP level, ALT/AST, INR and creatinine. These lab values will help determine need for further NAC.

*Janet Gray, RN, BSN, CSPI
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