Acetaminophen (APAP) overdose treatment when APAP levels are not available

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The Ontario Poison Centre has become aware that several hospitals have been unable to secure enough reagents/cartridges to be able to process acetaminophen concentrations. Acetaminophen levels are now “send outs” in these communities with a turnaround time of 3-5 days.

This may influence care and prompt us to change our recommendations as to whom to treat & when to stop.

Should a health care facility (HCF) be unable to process an acetaminophen level in a timely fashion on site, an accurate history of the ingestion is paramount. IF the history of ingestion is such that the patient could have taken a toxic dose (the amount available to the patient was > 10g or 200 mg/kg), then empiric treatment with n-acetylcysteine (NAC) should be started. The usual loading dose over 4 hours, followed by typical dosing maintenance should be recommended. To be conservative, these patients should receive a total of 24 hours of NAC infusion. IF the facility can do other labs, stopping NAC at the end of 24 hours will require that:

1. the AST OR ALT is under 100 IU,
2. the patient is not acidemic & well, and
3. the INR <= 2.0.

We would still recommend that the 4 hour acetaminophen level be sent out, and an acetaminophen level at the end of the 24 hour infusion. The HCF should be able to contact that patient (with a telephone number) once levels are back if unexpected results are reported.

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