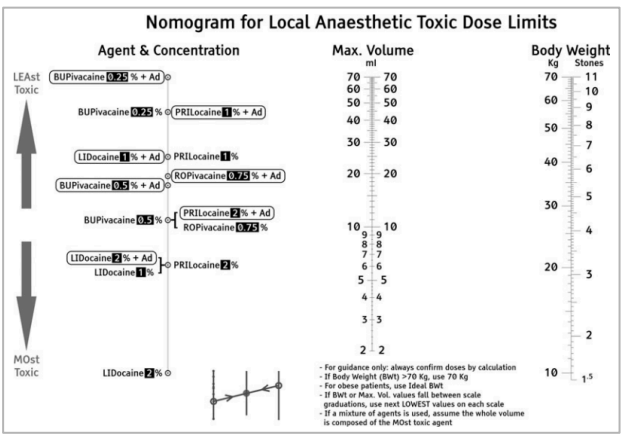
Calculating Maximum Dose for Local Anesthetics

Williams DJ, Walker JD. A nomogram for calculating maximum dose of local anaesthetic. Anaesthesia 2014. PMID 24820093

Nomogram Instructions:

- Use ideal body weight (IBW). If IBW >70 kg, use 70 kg dosing.
- If multiple local anesthetics (LAs) are used, calculate maximum dose assuming LA with greatest toxicity is used alone.
- Identify administered LA under "Agent & Concentration"
- Draw a line between LA Agent & Concentration (left) to patient´s IBW (right).
- Where this line intersects "Max Volume" (center) is the maximum dose (mL) that can be safely administered to the patient.
- These numbers assume that the toxic levels are:
    - Bupivacaine 2 mg/kg, Lidocaine 3 mg/kg, Lidocaine + "Ad"renaline (also known as Epinephrine) 6 mg/kg



Dosing of 20% INTRAVENOUS LIPID for local anesthetic toxicity

- Draw a **vertical line** downward from patient´s IBW. Intersection of this line with the 3 other axes indicate weight-based initial bolus volume, infusion rate, and total maximum dose of **intravenous lipid (20%)**.