Commonly Used Local Anesthetics

Anesthetic	Percentage	Time to Onset	Duration of Effect	Notes
Lidocaine	1-4%	2-5 minutes	1-3 hours	1
Bupivacaine	0.25-0.75%	5-10 minutes	4-6 hours	1
Ropivacaine	0.5-0.75%	5-10 minutes	4-6 hours	1,2,3

1. All local anesthetics can cause motor block with sufficient volume. That said, total solution doses of no more than 1% (lidocaine) or 0.25% (bupivacaine, ropivacaine) carry a lower risk for motor block. If using a higher concentration agent, dilute it to the above ratio.
2. Ropivacaine has a wider cerebral-cardiac toxicity ratio than bupivacaine, meaning that by the time the patient is experiencing CNS effects of local anesthetic toxicity (tinnitus, oral numbness, metallic taste in mouth) there is a lower risk of cardiac toxicity if anesthetic use is stopped.
3. Ropivacaine uniquely causes dexamethasone, a non-particulate steroid, to crystallize out of solution. It is not recommended to combine these two agents when a non-particulate solution is desired for safety reasons (such as a transforaminal epidural steroid injection.