

MEDICATION DOSING RECOMMENDATIONS | AGITATION

The agitation medication dosing recommendation table accompanies the [Care of the Agitated Patient Algorithm](#), a clinical tool to guide decision-making when caring for agitated pediatric patients in emergency settings



Medications for MILD/MODERATE Agitation					
In individuals who are not able to behaviorally de-escalate, medication may be more effective and should be considered early to prevent agitation escalation.					
Drug	Route	Dose	PRN Interval	Onset	Considerations
Diphenhydramine	PO/IM	1 mg/kg/dose MAX single dose: 50 mg	Every 6-8 hours	PO: 30-60 min IM: 5-30 min	Contraindications: AVOID in delirium and intoxication, or history of paradoxical reaction Side effects: QTc prolongation, disinhibition
Lorezapam	PO/SL/IM/IV	0.05-0.1 mg/kg/dose MAX single dose: 2 mg	Every 4-6 hours	PO: 30-60 min IM: 15-30 min IV: 5-15 min	Contraindications: AVOID in delirium, autism spectrum disorder, history of paradoxical reaction, or AVOID within 1 hour IM olanzapine Side effects: respiratory depression if administered with an antipsychotic, disinhibition, delirium
Clonidine	PO	0.05 mg-0.1 mg MAX total dose: 0.4 mg/day	Every 6-8 hours	PO: 30-60 min	Contraindications: hypotension, bradycardia. Caution use with antipsychotics and benzodiazepines Side effects: hypotension, bradycardia
Medications for SEVERE Agitation					
Antipsychotics are often required. An enteral route should be offered to the patient, but IM administration is often required.					
Chlorpromazine	PO	0.55 mg/kg/dose	Every 4-6 hours	30-60 min	Usual 1st single dose: 25 mg Contraindications: AVOID IV use due to risk of cardiovascular collapse/skin necrosis at injection site Side effects: hypotension, QTc prolongation
	IM	0.28-0.55 mg/kg/dose		15-30 min	
Haloperidol	PO/IM	0.025-0.075 mg/kg/dose	Every 6 hours	PO: 30-60 min IM: 15-30 min	Consider co-administration with a benzodiazepine and diphenhydramine Contraindications: history of NMS, severe dystonia, history of QTc prolongation Side effects: EPS, decreased seizure threshold, hypotension, QTc prolongation
Quetiapine	PO/IM	<40 kg: 6.25-12.5 mg ≥40 kg: 25-50 mg	Every 12-24 hours	IM: 30 min PO: 30 min	Side effects: hypotension, QTc prolongation (less risk than other antipsychotics)
Risperidone	PO/ODT	<20 kg: 0.25-0.5 mg ≥20 kg: 0.5-1 mg	Every 24 hours	30-60 min	Contraindications: history of NMS, severe dystonia, history of QTc prolongation Side effects: sedation, akathisia (restlessness/agitation), QTc prolongation, hypotension, EPS*
Olanzapine	PO/ODT	<40 kg: 1.25-2 mg ≥40 kg: 2.5-5 mg	Every 24 hours	1-8.5 hours	Contraindications: AVOID concurrent use of IM olanzapine and IM/IV benzodiazepines Side effects: paradoxical reaction, sedation
	IM	<40 kg: 2.5-5 mg ≥40 kg: 5-10 mg		15-45 min	

Mild: subtle behaviors such as fidgeting, irritability, fixed stare

Moderate: raising voice, yelling, pacing, head-banging, defensive stance

Severe: combative, imminent risk to self or others

EPS: extrapyramidal symptoms

NMS: neuroleptic malignant syndrome

PO: by mouth / **IM:** intramuscular / **IV:** intravenous