

Agitation

Purpose: To help address patient behavioral health escalations

- **Inclusion:** Patients greater than or equal 7 years with behavioral health concerns that are escalating
- **Exclusion:** Patients with an infectious process or delirium

	Agitated Fidgeting, pacing, rapid breathing, crying, rocking	Disruptive Yelling, refusing, arguing, name calling	Destructive/Dangerous Increased Gross Motor Activity Throwing, hitting, kicking, biting
Utilize non-pharmacological De-escalation Techniques	<ul style="list-style-type: none"> • Consider giving scheduled or home medication early • Ask patient/caregiver what interventions and/or medications helped in the past • Assess for underlying cause of agitation (hunger, pain, emotional trigger, etc) • Verbal De-escalation • Behavioral and environmental strategies to deescalate • Consider Child Life or Adaptive Care Consult 	<ul style="list-style-type: none"> • Environmental check for safety of patient and self • Continue interventions or techniques from agitation in addition to medication • Setting Limits 	<ul style="list-style-type: none"> • Teammate safety is priority • Consider BHRT • Environmental check for safety of patient and teammate • Consider psychiatric consult
If patient condition allows, oral administration should be utilized first for all etiologies and levels of behavior			
Unknown Etiology	Antihistamine or Benzodiazepine or 2nd generation antipsychotic	Antihistamine or Benzodiazepine or 2nd generation antipsychotic	1st generation antipsychotic + benzodiazepine or 2nd generation antipsychotic or Ketamine
Developmental Delay or Autism <i>Avoid IM, if possible, to avoid additional sensory assault, Avoid benzodiazepines due to disinhibition risk</i>	Consider an extra dose of home medication	Clonidine or 2nd generation antipsychotics	2nd generation antipsychotics
ADHD	Clonidine or Antihistamine or 2nd generation antipsychotics	Clonidine or Antihistamine or 2nd generation antipsychotics	Antihistamine or 2nd generation antipsychotics IM/IV
Psychosis/Mania	Second generation antipsychotics or Benzodiazepine	1st generation antipsychotic +/- benzodiazepine +/- diphenhydramine	1st generation antipsychotic +/- benzodiazepine +/- diphenhydramine
Oppositional Defiant Disorder or Conduct Disorder	Second generation antipsychotics or Benzodiazepine	Second generation antipsychotics or Benzodiazepine	Second generation antipsychotics or Benzodiazepine
Anxiety, PTSD	Hydroxyzine or Clonidine	Hydroxyzine or Clonidine or Benzodiazepine	Benzodiazepine
Acute alcohol or benzodiazepine intoxication	1st generation antipsychotics +/- diphenhydramine	1st generation antipsychotics +/- diphenhydramine	1st generation antipsychotics +/- diphenhydramine
Threat of Lethal - Harm to themselves or others Call Behavioral Health Response Team			

Reviewers:

Created by	Department	Creation Date	Version Date
Lubke, K., Morgan, M. Klein, S., Mccarthy, J. Rehberger, A. & Hassan, R.	ED/General Pediatrics/Behavioral Health/ICU	12/2023	10/2024

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Class	Medication	Dose	Max Individual Dose	Recommended Daily Max	Approximate Onset	PRN Repeat Interval	Relative Contraindications	Side Effects
Alpha-2 Adrenergic Agonist	Clonidine PO (Catapres)	27-45kg: 0.05mg >45kg 0.1mg	0.1 mg	3 doses	30 min	3 hours	Hypotension, bradycardia	Hypotension, bradycardia, concomitant administration with benzodiazepines or antipsychotics due to risk of hypotension
Antihistamines	Diphenhydramine PO/IM (Benadryl)	1 mg/kg	50 mg	100 mg	PO: 1.5 hrs, IM: 25 min	4 hours	Prior paradoxical response, developmental delay, current anticholinergic or TCA medications	Sedation, paradoxical response
	Hydroxyzine PO (Atarax)	1 mg/kg	50 mg	100 mg	30 min	5 hours		
Benzodiazepines	Lorazepam PO (Ativan)	0.05 - 0.1 mg/kg	4 mg	< 50 kg: 4 mg ≥50 kg: 8 mg	30 min	4 hours	Disinhibition, delirium, developmental delay, respiratory instability	Respiratory depression, disinhibition
	Lorazepam IV/IM (Ativan)				20 min			
	Midazolam IM (Versed)	0.1 mg/kg	5 mg	15 mg	5 min	7 min		
	Midazolam IN (Versed)	0.2 mg/kg	10 mg	10 mg	5.5 min	15 min		
	Midazolam IV (Versed)	0.05 mg/kg	2 mg	10 mg	3 min	5 min		
1st Generation Antipsychotics	Haloperidol IM (Haldol)	0.05 mg/kg	5 mg	n/a	20 min	30 min	QTc > 500, anticholinergic intoxication, active seizure disorder withdrawal syndrome	QTc prolongation, EPS symptoms
	Droperidol IM (Inapsine)	0.05 mg/kg	5 mg	5 mg	10 min	20 min		

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2nd Generation Antipsychotics	Ziprasidone IM (Geodon)	0.2 mg/kg	<12 yrs old: 10 mg ≥12 yrs old: 20 mg	20 mg	60 min	2 - 5 hours	QTc > 500, anticholinergic intoxication, active seizure disorder	QT prolongation
	Olanzapine PO/ODT (Zyprexa)	7-11 y/o: 2.5mg ≥12 y/o: 5mg	10 mg	20 mg	20 min	5 hours	Consider risk of respiratory depression if benzodiazepine given within 1 hour of IM olanzapine	Respiratory depression, orthostatic hypotension, QT prolongation, tachycardia, hypertension
	Olanzapine IM (Zyprexa)	0.1 mg/kg	5 mg	30 mg	15 min	30 min		
	Risperidone PO/ODT (Risperdal)	15-29 kg: 0.25 mg > 30 kg: 0.5 mg	0.5	2.5 mg	60 min	5 hours		
	Quetiapine PO (Seroquel)	0.5 mg/kg	50 mg	400 mg	90 min	12 hours		
NMDA Receptor Antagonist	Ketamine IM (100 mg/mL)	30 – 49 kg: 100 mg (1 mL) 50-59 kg: 150 mg (1.5 mL) 60-79 kg: 200 mg (2 mL) 89-99 kg: 250 mg (2.5 mL) ≥100 kg: 300 mg (3 mL)	300 mg	n/a	3 min	5 – 30 min	Patients who tachycardia or hypertension would constitute a serious hazard	Emergence reactions, tachycardia, hypertension
	Ketamine IV (10 mg/mL)	1 mg/kg	150 mg	n/a	1 min	5 min		

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