

INCLUSION CRITERIA

Minors > 2 years up to 18 years of age having a behavioral emergency displaying disruption or agitation

EXCLUSION CRITERIA

- Age ≤ 2 years old
- Active trauma or immediate life threatening event
- Medical management of delirium (including post anesthesia emergence, substance induced delirium or suspected toxidrome)
- Non-patient adults (>18 years of age)

MEASURES

Violent restraint used in BERT codes

CONSIDERATIONS¹

NCH-DE refer to Ambulatory/Common Area to ED BERT Process

DEFINITIONS

Mild Agitation

- Agitation WITHOUT unsafe behavior
- Low/Minimal acute safety concerns
- Able to redirect and engage with staff

Moderate Agitation

- Agitation with mild/moderate unsafe behavior
- Moderate acute safety concerns
- Difficult to redirect and engage with staff

Severe Agitation

- Agitation with severe unsafe behavior
- High acute safety concerns
- Unable to redirect or engage

ED CONSIDERATIONS¹ FOR IMMEDIATE DE-ESCALATION NCH-DE

- Need rapid control of psychomotor agitation: Droperidol (> 13 years of age).
- Severe agitation with physical aggression towards others (active assault) severe self injury, elopement and near immediate sedation is needed: Ketamine >2 years of age).

BERT Response

- Activate BERT
- Review medication list and obtain history about prior negative reactions
- Continue de-escalation attempts during pharmacologic treatment initiation

Located in ambulatory clinic or common area?¹

No

Yes

Does the family agree to transport to ED?

No

Yes

NCH-DE: Contact Risk Management

NCH-FL: Contact Law Enforcement

Pharmacologic Treatment

If BERT within the last 24 hours be aware of maximum medication dosing

- Consider extra PO dose of home maintenance medication if not given during de-escalation
- If patient does not tolerate oral intake or refuses oral medication, consider IM/IV route under moderate/severe agitation.

What is severity?

Mild Agitation

(yelling, pacing, hyperkinetic, opposition)

First-Line Therapy

- Administer clonidine PO

20-30 min

Assess severity?

Not Improving

Second-Line Therapy

- Administer lorazepam PO

20-30 min

Assess severity?

Not Improving

Third-Line Therapy

- Administer olanzapine PO

Moderate Agitation

(picking at self, head-banging, threatening violence)

First-Line Therapy

- Administer olanzapine PO

20-30 min

Successful intervention?

No

Second-Line Therapy

- Administer olanzapine PO/IM
- (If severe consider prioritizing IM route)

20-30 min

Successful intervention?

No

Third-Line Therapy

- Administer haloperidol IM
- If history of adverse reaction to haloperidol consider 3rd dose of olanzapine IM

Successful intervention?

Yes

No

- Complete debrief
- Clear BERT
- Update behavioral plan

- Reassess need for repeat dosing and consider a psychiatry consult for additional evaluation and management

BERT Pathway Medications (≥ 2 years of age and ≥ 10kg, unless otherwise specified)								
Medication	Onset of Action	Duration of Action	Considerations	Weight-Based Dosing (BERT Cumulative Max) ¹				
				>10 -15 kg	>15 – 30 kg	> 30- 50 kg	> 50 – 70 kg	> 70 kg
Clonidine	PO: 0.5 – 1 hour	6-12 hours	Use with caution in patients with CV history due to risk of hypotension	0.05 mg (Max 0.15 mg)		0.1 mg (Max 0.3 mg)	0.2 mg (Max 0.6 mg)	0.3 mg (Max 0.9 mg)
Haloperidol	- PO: 1 hour - IM: 15–30 minutes	3-8 hours	- EPS may be treated with benztropine. Refer to EPS table for clinical evaluation and dosing. - Monitor QTc with repeat dosing and/or concomitant use with other agents	0.5 mg (Max 2 mg)	1 mg (Max 4 mg)		2.5 mg (Max 10 mg)	5 mg (Max 20 mg)
Lorazepam	PO: 20 – 30 minutes	6-8 hours		1 mg (Max 3 mg)	1.5 mg Max 4.5 mg)	2 mg (Max 6 mg)		
Olanzapine	- PO: 20 – 30 minutes - IM: 15 minutes	12-24 hours		1.25 mg (Max 5 mg)		2.5 mg (Max 10 mg)		5 mg (Max 20 mg)

¹**BERT Cumulative Max** is the recommended maximum dose to administer during an acute BERT response

- This maximum may be less than the acceptable 24-hour maximum daily dose of the medication
- Individualized treatment plans that exceed the BERT Cumulative max shall be made in conjunction with Pediatric Psychiatry consultation

Monitoring: Baseline EKG when clinically indicated, continuous cardiorespiratory and pulse oximetry are optimal, vital signs, if a neuroleptic is given monitor for extrapyramidal symptoms (EPS) See appendix on page 2.

Emergency Department Consideration Medications NCH-DE ONLY (≥ 2 years of age and ≥ 10kg, unless otherwise specified)								
Medication	Onset of Action	Duration of Action	Stipulation(s)	Weight-Based Dosing				
				>10 -15 kg	>15 – 30 kg	> 30- 50 kg	> 50 – 70 kg	> 70 kg
Droperidol	IM : 3 – 10 minutes	2-4 hours	Only in ≥ 13 years of age				2.5 mg	5 mg
Ketamine IV (10 mg/mL)	0.5 – 2 minutes	5-10 minutes	Monitor for hypertension, tachycardia and emergence reactions	20 mg	30 mg	50 mg	100 mg	
Ketamine IM (100 mg/mL)	2 -4 minutes	12-25 minutes		40 mg	60 mg	100 mg	200 mg	

Extrapyramidal Symptoms (EPS)

Signs/ Symptoms

- **Acute dystonia**
 - Sustained or intermittent muscle contractions causing abnormal, often repetitive movements and/or postures
 - Movements are typically patterned or twisting
- **Drug-induced parkinsonism**
 - Bradykinesia, rigidity, and/or resting tremor
- **Akathisia**
 - Feeling of internal restlessness or jitteriness
 - Results in a compulsion to move, which may be visualized as repetitive movements
- **Tardive dyskinesia**
 - Involuntary choreoathetoid movements of the mouth, tongue, face, extremities, or trunk (lip smacking, tongue writhing or thrusting, jaw movements, facial grimacing, trunk or extremity writhing)
- Less frequent presentation of EPS:
 - Dysphagia
 - Esophageal dysmotility
 - Pulmonary aspiration

Treatment

- Give IM benztropine 0.05 mg/kg (Max. 2 mg) once

Disclaimer: The clinical pathways are based upon publicly available medical evidence and/or a consensus of medical practitioners at Nemours Children's Health ("Nemours") and are current at the time of publication. These clinical pathways are intended to be a guide for practitioners and may need to be adapted for each specific patient based on the practitioner's professional judgment, consideration of any unique circumstances, the needs of each patient and their family, and/or the availability of various resources at the health care institution where the patient is located.

VERSION MANAGEMENT

- Version 1.0 (10/25/2023): Go Live.
- Version 2.0 (7/28/2026): Look back review completed.

Questions about this pathway should be directed to **clinicalpathways@nemours.org**.

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