

## Promethazine HCl Injectable

Sandoz Canada Inc., the sole Canadian supplier of parenteral promethazine, has discontinued this product.<sup>1</sup>

### Indications for injectable promethazine<sup>2,3</sup>

- Prevention and treatment of nausea and vomiting when oral route is not feasible
- Pre/postoperative/obstetric sedation (uncommon)
- Acute allergic reactions when oral route is not feasible (uncommon)

### Alternate formulations of promethazine

- Oral products are available:
  - Histantil® 50 mg<sup>1,4</sup>
- Compound parenteral promethazine using bulk chemical
  - Powder listed in Medisca catalogue<sup>5</sup>

### Therapeutic alternatives for promethazine hydrochloride injectable

1. Injectable drugs for prevention and treatment of nausea and vomiting (list not inclusive)<sup>3,6</sup>:

Drug	Strength	Recommended Dose
<b>Dopamine antagonists</b>		
Haloperidol	5 mg/ml; 1 ml ampoules	2-5 mg IM q2h PRN (adult)
Methotrimeprazine	25 mg/ml; 1 ml ampoules	Adult: 6.25-25 mg IV; 10-25 mg IM q8h PRN; 12.5-50 mg SC q4-6h PRN
		Ped: 0.0625-0.125 mg/kg/day IM in one or divided doses
Metoclopramide	5 mg/ml; 2 ml, 10 ml, 30 ml vials	10-20 mg IV/IM up to QID (adult)
<b>Antihistamines</b>		
Dimenhydrinate	10 mg/ml IV; 5 ml vials 50 mg/ml IM; 1 ml ampoules	Adult: 50-100 mg IV/IM q4-6h PRN (max:400 mg/24h)
		Ped: 5 mg/kg/day or 150 mg/m <sup>2</sup> /day in 4 divided doses (max: 300 mg/24h)
		PONV: 50 mg pre-operatively, repeat post- operatively PRN to max 400 mg/24h
Diphenhydramine	50 mg/ml; 1 ml ampoules	Adult: 25-50 mg IV/IM q4h (max:400 mg/24h)
		Ped: 5 mg/kg/day or 150 mg/m <sup>2</sup> /day in 4 divided doses (max: 300 mg/24h)
<b>Serotonin antagonists</b>		
Ondansetron	2 mg/ml; 2ml, 4ml ampoules	PONV Adult: 4mg IV immediately before anesthesia or post-operatively
		PONV Ped: 0.1 mg/kg IV; max: 4 mg/kg
PONV— post-operative nausea and vomiting		

2. Preoperative, postoperative, obstetric sedation: benzodiazepines (e.g. midazolam, lorazepam), opioids (e.g. fentanyl) short-acting anaesthetics (e.g. etomidate, ketamine, propofol)
3. Allergic reactions: injectable antihistamines (e.g., diphenhydramine, hydroxyzine)

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**References:** 1. PharmaClik. McKesson Canada. Available at <https://www.mckesson.ca/customer-access>. Accessed 07July2016. 2. Promethazine hydrochloride injection. Product Monograph. In: Health Canada website. Available at <http://webprod5.hc-sc.gc.ca/dpd-bdpp/info.do?code=9920&lang=eng>. Accessed 7July2016. 3. Various monographs. The Ottawa Hospital Parenteral Drug Therapy Manual, 25<sup>th</sup> ed, 2014. 4. Drug Product Database. In: Health Canada website. Available at <http://webprod5.hc-sc.gc.ca/dpd-bdpp/index-eng.jsp>. Accessed 07July2016. 5. Medisca product catalogue. Available at [www.medisca.ca](http://www.medisca.ca). Accessed 7July2016. 6. Stanford FC. Nausea and vomiting in adults. In Dynamed online. Available at [www.dynamed.com](http://www.dynamed.com) (by subscription). Accessed 7July2016. 7. NAUSEA & VOMITING (N/V): Symptom Management. In RxFiles Drug Comparison Charts online. Available at [www.rxfiles.ca](http://www.rxfiles.ca). Accessed 12Jul2016. 8. Habal R. Chapter 180: Drug Therapy in Pregnancy. In: Ed-in-Chief Marx J, Rosen's Emergency Medicine, Elsevier Health, 8<sup>th</sup> edition, 2014: pp 2316-2330.