

DRUG CARDS | DAILY



NAME(S): Generic: promethazine (proe METH a zeen) | **Brand:** Phenergan, Promethegan

PHARMACOLOGIC & THERAPEUTIC CLASS: Antiemetic | 1st Gen H1 Histamine Antagonist | Phenothiazine Derivative

DOSAGE FORM & STRENGTH: **Solution, INJ:** 25 mg/mL, 50 mg/mL | **Solution, PO:** 6.25 mg/5 mL | **Suppository:** 12.5 mg, 25 mg, 50 mg | **Syrup:** 6.25 mg/5 mL, **Tablet:** 12.5 mg, 25 mg, 50 mg

INDICATION(S) & DOSING(S): ADULTS (NOTE: IM is the preferred route over IV)

1. **Allergic conditions:** Tx Range: 6.25-25 mg IM/IV tid-qid prn given ac and qhs. The second IM/IV dose may be given 2h after the first dose. Max of 100 mg/day.
2. **Motion sickness:** **[PO]** 25 mg PO bid 0.5-1 h prior to travel. **[IM]** 25 mg IM bid.
3. **Nausea/vomiting:** Tx Range: 12.5-25 mg PO/IM/IV q4-6h. **[PO/IM]** Max 50 mg/dose. **[IV]** 25 mg/dose. Max of 100 mg/day.
4. **Sedation:** Tx Range: 25-50 mg PO/IM for 1 dose. Max 50 mg/dose
5. **Urticaria:** **Tx Range:** 6.25-25 mg IM/IV tid-qid prn given ac and qhs. A second IM/IV dose can be given 2h after the initial dose. Max 100 mg/day.

INDICATION(S) & DOSING(S): PEDIATRICS (2 years of age & older, use lowest effective dose, & avoid respiratory depressants, IM is the preferred route over IV)

1. **Allergic conditions:** Wt-Based Tx Dose: 0.1 mg/kg/dose PO q6h prn w/ additional 0.5 mg/kg/dose PO qhs. Max of 12.5 mg/dose during day and 25 mg/dose if taken at bedtime.
2. **Motion sickness:** Wt-Based Tx Dose: 0.1 mg/kg/dose PO/IM q12h initiated 0.5-1h before travel. Max of 25 mg/dose and 100 mg/day.
3. **Nausea/vomiting:** Wt-Based Tx Dose: 0.25-1 mg/kg/dose PO/IM/IV q4-6h prn. Max of 25 mg/dose and 100 mg/day.
4. **Sedation:** Tx Dose: 12.5-25 mg PO/IM/IV for 1 dose w/ a max of 25 mg/dose.
5. **Urticaria:** Wt-Based Tx Dose (same as in allergic conditions): 0.1 mg/kg/dose PO q6h prn w/ additional 0.5 mg/kg/dose PO qhs. Max of 12.5 mg/dose during day and 25 mg/dose if taken at bedtime.

MECHANISM OF ACTION & PHARMACOLOGY

- **MOA:** Promethazine is a non-selective antagonist of both central and peripheral H1 histamine receptors. There is strong alpha adrenergic inhibition from the blockade of postsynaptic mesolimbic dopaminergic receptors in the brain. In addition there is also a blocking effect for muscarinic receptors. The various anticholinergic activity is the proposed cause for the medication's sedative and anti-emetic activity.
- **Absorption** is rapid and complete. | Hepatically **metabolized** via CYP2D6 and CYP2B6 pathways. | **Excreted** through the urine and feces as inactive metabolites. | The **onset of action** for PO/IM is around 20 minutes with IV around 5 minutes. | The **time to peak** PO (syrup) is around 1.4-4.2 hours w/ the rectal suppositories around 4.8-11.6 hours. | The **duration of action** is 4-6h with a max of 12 hours. | The **half-life elimination** for IM is 10 hours, IV 9-16 hours, and suppositories 16-19 hours. | 93% **protein bound**.



SPECIAL POPULATIONS & CONSIDERATIONS

- **Geriatric:** Avoid use due to Beer's Criteria. | **IV administration should be avoided** but when necessary extra precautionary steps must be followed. Dilution in 10-20 mL of normal saline. | **Extravasation management:** Stop infusion. Disconnect and aspirate extravasated solution w/o flushing the line. Remove needle/cannula and elevate the extremity. | **Pregnancy:** Caution near term and during labor. Risk of respiratory depression in neonate. Crosses placenta and platelet aggregation may be inhibited in newborns. | **Lactation:** Consider an alternative. Possible risk of CNS and respiratory depression.

SIDE EFFECTS

- **Common:** Drowsiness, dizziness, confusion, sedation, blurred vision, dermatitis, and others.
- **Serious:** Tissue damage, respiratory depression, seizures, thrombocytopenia, agranulocytosis, hallucinations, EPS, photosensitivity, QT prolongation, and others.

BLACK BOX WARNING: Respiratory Depression – Contraindicated in <2 yo due to resp depression. In pts 2 yo and older use lowest effect dose & extreme caution. Gangrene, Severe Tissue Injury – Injection can cause severe irritation & tissue damage (burning, pain, necrosis) regardless of admin route. In some cases surgical intervention may be required.

DRUG INTERACTIONS

- **Characteristic for DI:** CYP2D6 substrate, anticholinergic effects, CNS depression, EPS, lowers seizure threshold, photosensitivity, QT prolongation.
- **Contraindicated drugs:** potassium chloride, potassium citrate, quinidine, among others.
- **Drugs to avoid:** alprazolam, baclofen, butalbital, carisoprodol, cetirizine, citalopram, among others.

MONITORING PARAMETERS

- Relief of s/sx, CNS effects (such as sedation, delirium, EPS), s/sx of tissue injury w/ IV administration, CBC w/ differential, and ophthalmic exam if prolonged tx.

PATIENT COUNSELING INFORMATION

- When given orally administer **w/ food, water, or milk** to avoid GI distress.
- Promethazine is used to **treat allergy s/sx, motion sickness, ease pain, and to prevent upset stomach/throwing up from surgery.**

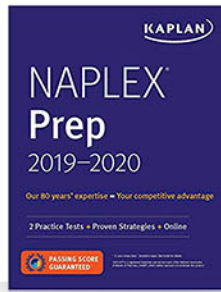
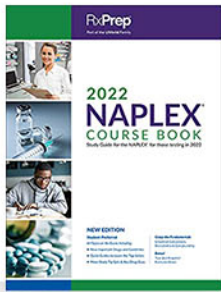
REFERENCE(S)

1. <https://online.epocrates.com/drugs/6910/promethazine/Monograph>
2. <https://www.drugs.com/ppa/promethazine.html>

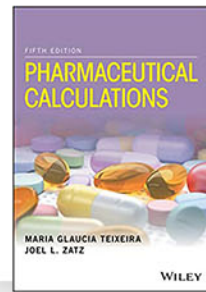
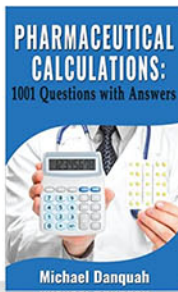
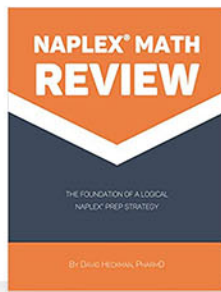
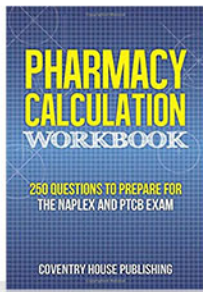


PREPARE FOR SUCCESS!

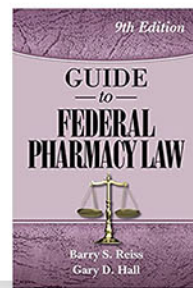
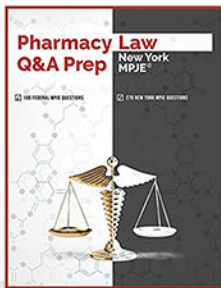
Comprehensive (NAPLEX)



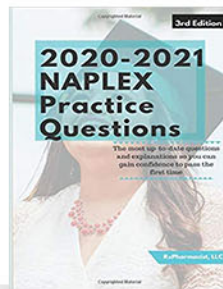
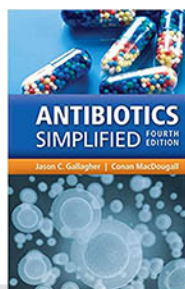
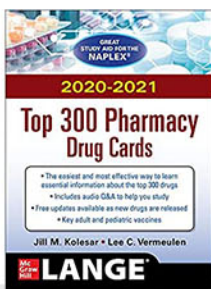
Calculations (NAPLEX)



Pharmacy Law (MPJE)



Supplemental



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DRUG CARDS DAILY

Monday at 7 am EST
(6 am CST, 4 am PST)

HEY NEW GRAD!

So you landed that perfect job offer or got the perfect match for your PGY1 and now the **ONLY** thing standing in your way is passing the NAPLEX and MPJE.

Here are some NAPLEX & MPJE prep recommendations to help you do everything you can to **pass the first time!**

HEY STUDENT!

When I was P1 one of the best pieces of advice I got from those before me was to use a NAPLEX Prep book while learning each topic.

This helps focus your learning and the repetition helps to retain info and indirectly prepare you for the NAPLEX



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