

GUAIFENESIN + PSEUDOEPHEDRINE + DEXTROMETHORPHAN SYRUP

Class: Antitussive/Decongestant/Expectorant

Indications: Temporarily relieves nasal congestion and controls cough due to minor throat and bronchial irritation; helps loosen phlegm and thin bronchial secretions to make coughs more productive

Available dosage form in the hospital:

-COUGH MIXTURE (GUAIFENESIN 100MG + PSEUDOEPHEDRINE 30MG + DEXTROMETHORPHAN 15MG) SYRUP

-COUGH MIXTURE (GUAIFENSINE 100MG + PSEUDOEPHEDRINE 20MG + DEXTROMETHORPHAN 5 MG) SYRUP

Dosage:

Adult : 5 mL every 4-6 hours, not to exceed 30 mL/24 hours*.

* Oral: **Note:** Also refer to specific product labeling.

Geriatric

Refer to adult dosing.

Common side effect:

Guaifenesin: Frequency not defined:

Central nervous system: Dizziness, drowsiness, headache

Dermatologic: Rash

Endocrine & metabolic: Uric acid levels decreased

Gastrointestinal: Nausea, stomach pain, vomiting

Postmarketing and/or case reports: Kidney stone formation (with consumption of large quantities)

Dextromethorphan: Frequency not defined.

Central nervous system: Confusion, excitement, irritability, nervousness, serotonin syndrome

Pseudoephedrine: Frequency not defined.

Cardiovascular: Arrhythmia, cardiovascular collapse with hypotension, hypertension, palpitation, tachycardia

Central nervous system: Chills, confusion, coordination impaired, dizziness, drowsiness, excitability, fatigue, hallucination, headache, insomnia, nervousness, neuritis, restlessness, seizure, transient stimulation, vertigo

Dermatologic: Photosensitivity, rash, urticaria

Gastrointestinal: Anorexia, constipation, diarrhea, dry throat, ischemic colitis, nausea, vomiting, xerostomia

Genitourinary: Difficult urination, dysuria, polyuria, urinary retention

Hematologic: Agranulocytosis, hemolytic anemia, thrombocytopenia

Neuromuscular & skeletal: Tremor, weakness

Ocular: Blurred vision, diplopia

Otic: Tinnitus

Respiratory: Chest/throat tightness, dry nose, dyspnea, nasal congestion, thickening of bronchial secretions, wheezing

Miscellaneous: Anaphylaxis, diaphoresis

Pregnancy Risk Factor:

Guaifenesin : Based on the limited available data, an increased risk of adverse birth outcomes has not been observed following maternal use of guaifenesin in pregnancy. Alcohol may be present in some liquid formulations of guaifenesin. If consumed in sufficient quantities during pregnancy, fetal alcohol syndrome may result. Guaifenesin has been investigated as an agent to improve cervical mucus and improve fertility.

Pseudoephedrine: Use of pseudoephedrine during the first trimester may be associated with a possible risk of gastroschisis, small intestinal atresia, and hemifacial microsomia due to pseudoephedrine's vasoconstrictive effects; additional studies are needed to define the magnitude of risk. Single doses of pseudoephedrine were not found to adversely affect the fetus during the third trimester of pregnancy (limited data); however, fetal tachycardia was noted in a case report following maternal use of an extended release product for multiple days. Decongestants are not the preferred agents for the treatment of rhinitis during pregnancy. Oral pseudoephedrine should be avoided during the first trimester.

Dextromethorphan: Maternal use of standard OTC doses of dextromethorphan when used as an antitussive during the first trimester of pregnancy has not been found to increase the risk of teratogenic effects. Dextromethorphan is metabolized in the liver via CYP2D6 and CYP3A4 enzymes. The activity of both enzymes is increased in the mother during pregnancy. In the fetus, CYP2D6 activity is low in the fetal liver and CYP3A4 activity is present by ~17 weeks gestation.