



Poison HOTLINE

1-800-222-1222

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Did you know

Non-cardiogenic pulmonary edema is a rare but serious complication of naloxone. Other adverse effects include hypertension, ventricular arrhythmias, cardiac arrest, and seizures. Patients with pre-existing cardiac disease or who have received cardiotoxic drugs may be at higher risk of complications. Noncardiogenic pulmonary edema has been seen in postoperative patients given naloxone.

If pulmonary edema develops, oxygen, BiPAP or intubation may be required, along with diuretics and nitroglycerin.

Because of this rare but potentially severe complication, the airway should be secured before naloxone administration.

Buprenorphine

Buprenorphine is a semi-synthetic opioid agonist-antagonist used for treating opioid dependence. It is a partial agonist at mu-opioid receptors (responsible for analgesia, euphoria, sedation) and is an antagonist at kappa-opioid receptors (responsible for analgesia, dysphoria).

- *Opioid Agonists* are drugs that cause the opioid effect; e.g oxycodone, hydrocodone, heroin, and methadone. Partial agonists produce less effect than full agonists. Partial agonists typically have a ceiling effect, meaning there is a maximum effect the drug can cause, even with increasing doses of the drug.
- *Opioid Antagonists* are drugs that block and /or reverse the effects of opioid agonists. Naloxone (Narcan®) is an opioid antagonist and is used to reverse the respiratory and CNS depression that occur in opioid overdoses.

As a partial opioid agonist, buprenorphine can suppress withdrawal symptoms and cravings, but does not cause euphoria in opioid-tolerant patients. The antagonist property of the medication blocks the effect of other opioids at the opioid receptors. Buprenorphine carries a lower risk of abuse and addiction because when all available opioid receptors are occupied with buprenorphine, no additional opioid effect is produced larger doses of the drug. This is called the "ceiling effect." The ceiling effect, the antagonist properties and the lower possibility of precipitating withdrawal contribute to buprenorphine's favorable safety profile and lowers the risk of overdose and misuse.

Buprenorphine is available as monotherapy or with naloxone. Naloxone has little effect when taken orally or sublingually, and is combined with buprenorphine to prevent the abuse and misuse (injection) of this medication.

In therapeutic dosing, sublingual buprenorphine has a long duration of action.

Any child who ingests buprenorphine should be referred to a healthcare facility. Significant toxicity has developed in children after ingestion of only half a tablet. Overdoses require observation for a minimum of 12-24 hours due to the potential for delayed or recurrent respiratory and CNS depression. Good supportive care with close monitoring of respirations and ventilations is required. Naloxone may be used to reverse respiratory depression.

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POISON
Help
1-800-222-1222

The logo for Poison Help, featuring the word "POISON" in a bold, sans-serif font above the word "Help" in a larger, bold, sans-serif font. To the right of the word "Help" is a red pill bottle with a white cap and a white skull and crossbones symbol on its side. Below the word "Help" is the phone number "1-800-222-1222".

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