

A large, white, serif 'RX' logo is centered within a dark gray square box in the top right corner of the page.

**Drug Name: Calcium Chloride**

**Trade Name: Calcium Chloride, Calcium, CaCl<sub>2</sub>**

**Class:**

- Electrolyte replacement

**Mechanism of Action:**

- Increase the force of cardiac contractility, by initiating myofibril shortening
- In normally functioning hearts calcium will produce positive inotropic and vasoconstrictive effects and increase systemic arterial blood pressure
- In abnormally functioning hearts calcium will produce positive inotropic effects may increase or decrease systemic vascular resistance
- It also appears to increase ventricular automaticity

**Indications:**

- Hyperkalemia
- Hypermagnesemia (Antidote for respiratory depression due to MgSO<sub>4</sub> administration)
- Hypocalcemia (Ca Blocker Overdose)

**Contraindications:**

- Hypercalcemia
- Digitalis toxicity
- VF during resuscitation

**Precautions:**

- May induce digitalis toxicity in patients receiving digoxin
- Can cause tissue necrosis & sloughing
- Pregnancy (C)
- Respiratory disease
- Cor pulmonale
- Respiratory Failure

**Dosage:**

**Adults:**

- Hyperkalemia, Asystole/PEA with suspected hyperkalemia, and Calcium Channel BLOCKER Overdose--500-1000 mg slow IV push

**Pediatrics:**

- 20 mg/kg infused slowly over 10 minutes (no faster than 100 mg/min)  
Max--1 g / dose

**Onset:**

- 5-15 minutes

**Duration:**

- Dose dependent (effects may persist for 4 hrs. after IV administration)

**DRUG: CALCIUM CHLORIDE**

# RX

## DRUG: CALCIUM CHLORIDE

### Side Effects:

- Metallic taste
- Burning
- "Heat waves"
- Bradycardia (may cause asystole)
- Hypotension
- Cardiac arrhythmias
- Increased digitalis toxicity
- Extravasation with necrosis and sloughing
- Vasospasm in coronary and cerebral arteries.
- N/V

### Interactions:

- Precipitates with sodium bicarbonate, epinephrine and potassium phosphate
- When given to a patient on Digoxin, can cause elevated Digoxin levels and possibly digitalis toxicity
- May antagonize the effects of Verapamil

### PEARLS:

- ***Standard medical control and deviation guidelines apply unless otherwise stated.***
- ***To prevent tissue necrosis, make sure to administer the drug through an IV that is patent and flowing well.***
- ***Flush well between administration of calcium & sodium bicarb to avoid precipitate.***
- ***May sometimes be requested by medical control to be co-administered with Cardizem to offset hypotension in hypotensive patients.***