

PUBLIC HEALTH ALERT

Questions? Contact the Washington Poison Center 24/7/365 at 1 (800) 222-1222.
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Chloroquine and Hydroxychloroquine Poisoning

Chloroquine (CQ) and Hydroxychloroquine (HCQ) are medications often used to prevent and treat malaria and other rheumatologic disorders such as lupus and rheumatoid arthritis. Their use is currently being studied in treating patients with confirmed coronavirus (COVID-19) disease. These prescription medicines should only be taken under the supervision of a prescribing healthcare provider for approved indications.

WHAT IS THE CONCERN?

- To “prevent” contracting coronavirus, some people are trying to obtain CQ and HCQ via non-regulated markets, such as on the internet, and/or by buying non-medical forms that are not meant for human ingestion (e.g. fish tank cleaner). Using these non-prescribed forms of CQ and HCQ has resulted in severe poisoning and, in some cases, death.
- CQ and HCQ have narrow therapeutic margins and can result in significant clinical toxicity with therapeutic errors, inappropriate dosing, and interactions with other drugs.
- Deaths have been reported in young children ingesting 1-2 tablets and older children and adults with ingesting only 3-5 times the recommended dose.
- Clinical Toxicity and Evaluation:

Onset: 1-3 hours

Duration: hours to days, although death has been reported in the prehospital setting

Clinical Toxic Effects:

- **GI:** Nausea, vomiting, diarrhea
- **CNS:** Agitation, sedation, seizures, coma. Psychosis and hallucinations may occur in pediatric patients.
- **Resp:** Respiratory depression, apnea
- **CV:** Hypotension, bradycardia, wide complex tachycardia, ventricular tachycardia, ventricular fibrillation, Torsades de pointes
- **Electrolytes:** Hypokalemia, hypoglycemia
- **Eye:** Blurred vision, diplopia, photophobia, transient blindness
- **Heme:** Hemolysis, especially patients with G-6PD deficiency

Labs & Monitoring:

- Blood Pressure
- ECG: QRS widening and QT prolongation
- Basic metabolic panel
- K⁺, Ca²⁺, Magnesium
- CBC for hemolysis
- CQ and HCQ levels are not helpful acutely

TREATMENT

- Early aggressive supportive management of severe toxicity: Intubation, Mechanical Ventilation.
- Unique therapies for the severe cardiovascular toxicity have resulted in improved outcomes and are time sensitive: **High Dose Epinephrine and High Dose Diazepam.**
- **Please call the Washington Poison Center for immediate assistance and consult with our physician Medical Toxicologists for further indications and details.**