

Poison HOTLINE

1-800-222-1222

February 2024

PARENTS:

Learn about teen medicine abuse

www.StopMedicineAbuse.org

Did you know

Many manufacturers of cough and cold products containing dextromethorphan (DXM) include warning labels to increase awareness about the dangers of DXM abuse.

There are well over 100 overthe-counter (OTC) medicines that contain DXM, either as a single active ingredient or in combination with other medicines. Youth are well aware of the OTC brands containing the highest dose of DXM.

Triple C is a slang reference to an over-the-counter cough and cold product with imprint CCC and contains large amounts of dextromethorphan. This is a common substance in DXM overdoses reported to IPCC.



Dextromethorphan

Dextromethorphan is an over-the-counter drug used as a cough suppressant. It was approved by the FDA in 1958. In addition to being a product with a single active ingredient, it is commonly found in combination products with acetaminophen, chlorpheniramine, doxylamine, diphenhydramine, and other medications. It is structurally similar to opioids but does not provide analgesic effects.

Dextromethorphan is frequently misused/abused by adolescents to experience euphoria and/or hallucinations. Common street names are: "DEX", "DXM", "Roboshots", among others. Unfortunately, side effects/negative consequences do occur if too much is ingested.

Signs of dextromethorphan toxicity can be seen in therapeutic errors and/or in overdose. There is a wide range of clinical effects in toxicity. Mild to moderate effects include, ataxia, nystagmus, dystonia, hyperexcitability, changes in muscle reflexes and most commonly lethargy. In severe toxicity, seizures, psychosis and delirium, hypotension, coma and respiratory depression can all be seen. CNS depression and/or seizures have occurred within 30 min after ingestion. If dextromethorphan is taken with other serotonergic drugs, there is risk for serotonin syndrome.

Treatment is symptomatic and supportive. Treat agitation, confusion, and psychotic delirium with benzodiazepines. Treat serotonin syndrome with benzodiazepines, avoidance of serotonergic agents, and monitoring for/avoiding hyperthermia. Treat seizures with benzodiazepines, barbiturates, or propofol if seizures persist or recur. Severe cases could require neuromuscular paralysis and/or intubation.

Dextromethorphan combined with bupropion (AuvelityTM) is used in adults with major depressive disorder. In this combination of drugs, bupropion inhibits the metabolism of dextromethorphan. Therefore, it is anticipated that symptoms in overdose will be more persistent and severe. At this time, the clinical effects in overdose are unknown for this new product.

Susie Eades, RN, CSPI Certified Specialist in Poison Information



Hotline Editors: Dan McCabe, MD and Josh Trebach, MD Post and share this edition of **Poison Hotline** with your colleagues. Send comments or questions to Poison Hotline, 712-234-8775 (fax) or Tammy.Noble@unitypoint.org. To subscribe or unsubscribe from this distribution list, contact the IPCC education office at 712-279-3717. Read past issues of **Poison Hotline** at www.iowapoison.org.