

Preventive Health and Health Services Block Grant

SUCCESS STORY 2017

Emergency Medical System Poison Control System

Health Alert Issued: Commonly Used Medicinal Herbs Caused Serious Poisonings

Issue: The use of herbal remedies including Traditional Chinese medicines is a common cultural practice in California. Unfortunately, the contents of herbal preparations can be difficult to determine, and ingredients may have the potential to produce serious toxicity. Aconitine alkaloids are one such example. While these alkaloids have been used in Traditional Chinese medicines for the treatment of various maladies, the plant must be carefully processed prior to use in order to avoid severe cardiotoxicity and neurotoxicity.

Intervention: In February and March of 2017, the California Poison Control System (CPCS) identified two patients with severe cardiotoxicity related to the use of an unknown herbal preparation. Both patients developed dizziness, paresthesias and syncope after ingesting an herbal tea. Based on the history, physical exam findings, and initial electrocardiograms, aconitine ingestion was suspected. Despite advanced supportive care, one patient died after a prolonged hospital course. The second recovered without significant negative long-term health effects. Investigations by CPCS identified aconitine in blood samples from both patients as well as in collected samples of the herbs provided by the patients. CPCS worked with the California Department of Public Health to identify a single point of sale in San Francisco from which both patients had purchased the herbs.

Impact: The surveillance efforts of the CPCS led to the identification of a poisoning of public health significance. CPCS was able to confirm the exposure and notified the appropriate public health authorities. As a result, the source of the poisoning was identified, and the suspected herbs were embargoed, potentially averting additional exposures. CPCS worked with public health officials to distribute a citywide health alert aimed at informing health care providers, and with the media to disseminate information to the public. Subsequent public education outreach efforts by CPCS have included materials on the dangers of herbal preparations including aconitine and have focused on reaching the culturally diverse population of California.