



COMMONWEALTH of VIRGINIA

Department of Health

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Acute Hepatitis and Liver Failure Following the Use of a Dietary Supplement

Dear Colleague:

On October 8th, the Centers for Disease Control and Prevention (CDC) issued a health advisory “Acute Hepatitis and Liver Failure Following the Use of a Dietary Supplement Intended for Weight Loss or Muscle Building” (<http://www.bt.cdc.gov/HAN/han00356.asp> and attached). Since early September 2013, 29 patients, who presented with acute hepatitis after using a nutritional supplement for weight loss or muscle building, have been reported to the Hawaii Department of Health. While the focus of this public health investigation has been in Hawaii, national case-finding efforts are underway. I am writing to you today to assure your awareness and ask for your assistance in determining the extent of the problem.

Please consider the possibility of supplement-related hepatotoxicity when evaluating patients with suspected acute hepatitis. The following guidance is provided to assist you in your evaluation of such patients and to assure coordination with Virginia’s governmental public health system.

Please report patients meeting the following definition to the local health district (<http://www.vdh.virginia.gov/LHD/index.htm>) and the Poison Control Center (1800-222-1222), as well as to the U.S. Food and Drug Administration (FDA) MedWatch program online at <https://www.accessdata.fda.gov/scripts/medwatch/> or by phone at 1-888-INFO-FDA.

- An individual with acute-onset hepatitis of unknown etiology who developed symptoms on or after April 1, 2013 following use of a non-prescription weight loss or muscle building dietary supplement during the 60 days prior to illness onset.
- Acute-onset hepatitis of unknown etiology is defined as having BOTH
 - ALT \geq 4 times the upper limit of normal
 - Total bilirubin \geq 2 times the upper limit of normal
- AND negative workup for infectious or other explicative etiologies for hepatitis.

To date, no case of acute hepatitis or liver failure has been reported following use of OxyELITE Pro obtained from outlets in Virginia. The FDA has information about this investigation at <http://www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm370849.htm> as well as guidance for clinicians and users of any dietary supplement at <http://www.fda.gov/food/dietarysupplements/>. As always, please report any serious adverse events with any medication, including dietary supplements and non-prescription medications, to the FDA’s MedWatch program. Thank you for your ongoing efforts to work with us to protect the public’s health.

Sincerely,

Cynthia C. Romero, MD, FAAFP
State Health Commissioner

This is an official

CDC HEALTH ADVISORY

Distributed via the CDC Health Alert Network
October 8, 2013, 2:30 ET (14:30 PM ET)
CDCHAN-00356

Acute Hepatitis and Liver Failure Following the Use of a Dietary Supplement Intended for Weight Loss or Muscle Building

Summary: *Recently, a number of previously healthy individuals developed acute hepatitis and sudden liver failure of unknown cause after using a dietary supplement for weight loss or muscle building. CDC recommends increased vigilance by public health agencies, emergency departments, and healthcare providers for patients who develop acute hepatitis or liver failure following use of a weight loss or muscle building nutritional supplement. CDC requests that state health departments report such occurrences to the CDC. CDC also recommends that, as part of a comprehensive evaluation, clinicians evaluating patients with acute hepatitis should ask about consumption of dietary supplements.*

Background:

On September 9, 2013, the Hawaii Department of Health (DOH) was notified of seven patients with severe acute hepatitis and sudden liver failure of unknown cause. The patients were previously healthy and sought medical care from May through September 2013. Clinicians reported that the seven patients had all used OxyELITE Pro, a dietary supplement marketed for weight loss and muscle gain, prior to illness onset.

The investigation is ongoing and the data presented are preliminary. Thus far, clinicians have reported 45 patients to the Hawaii DOH in response to a public health alert. Of those, 29 patients, including the original seven, were confirmed to have acute hepatitis after using a nutritional supplement for weight loss or muscle building. The median age of the 29 patients is 33 years; 14 (48%) are male. The date of the first reported laboratory test was used as a proxy for illness onset and ranged from May 10 through October 3, 2013. The most commonly reported symptoms included loss of appetite, light-colored stools, dark urine, and jaundice. Median laboratory values reported at the peak of illness were the following:

- aspartate aminotransferase (AST) 1,128 IU/L;
- alanine transaminase (ALT) 1,793 IU/L;
- alkaline phosphatase 150 IU/L; and
- total bilirubin 12.6 mg/dL.

Ten patients had liver biopsy data available at the time of this report. Seven had histology consistent with hepatitis from drug/toxic injury, with findings including hepatocellular necrosis and cholestasis. Three patients had liver biopsy findings of acute hepatitis associated with other etiologies such as autoimmune hepatitis. Eleven (38%) patients were hospitalized, with a median duration of seven days. One patient died, and two patients received liver transplants. Two remain hospitalized, and all other hospitalized patients have been discharged.

Of the 29 identified patients, 24 (83%) reported using OxyELITE Pro during the 60 days prior to illness onset. There was no other dietary supplement or medication use reported in common by more than two patients.

National case finding efforts have identified several individuals from states outside Hawaii with reported OxyELITE Pro or other weight loss or muscle building dietary supplement use prior to the development of acute hepatitis of unknown cause. CDC, in collaboration with state health departments, is collecting additional clinical and epidemiologic information from these individuals to determine if this outbreak is national in scope.

Case definition:

An individual with acute-onset hepatitis of unknown etiology that developed symptoms on or after April 1, 2013 following use of a non-prescription weight loss or muscle building dietary supplement during the 60 days prior to illness onset.

With acute-onset hepatitis of unknown etiology defined as having BOTH:

- ALT \geq 4 times the upper limit of normal
- Total bilirubin \geq 2 times the upper limit of normal

AND

-negative workup for infectious or other explicative etiologies for hepatitis. Workup for other potential etiologies should include:

- Hepatic imaging (i.e., ultrasound/doppler, CT scan, MRI) not consistent with alternative, explicative etiologies
- Negative viral hepatitis panel
- No pre-existing diagnosis of chronic liver disease (e.g., autoimmune hepatitis, primary biliary cirrhosis, primary sclerosing cholangitis, Wilson's disease, hemochromatosis)
- No recent hypotensive shock or septic episodes
- No history of alcoholism documented in medical records

Recommendations:

- Clinicians evaluating patients with acute hepatitis should ask about consumption of dietary supplements as part of a comprehensive evaluation.
- Clinicians should report patients meeting the case definition to the local or state health department, as well as the US Food and Drug Administration's MedWatch program online at <https://www.accessdata.fda.gov/scripts/medwatch/> or by phone at 1-888-INFO-FDA.
- People who use dietary supplements for weight loss or muscle gain should do so with caution and under a medical provider's close supervision.

For more information:

State public health agencies should contact CDC at (866) 933-5295 if they identify patients who meet the case definition.

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

Categories of Health Alert Network messages:

- Health Alert** Requires immediate action or attention; highest level of importance
- Health Advisory** May not require immediate action; provides important information for a specific incident or situation
- Health Update** Unlikely to require immediate action; provides updated information regarding an incident or situation
- HAN Info Service** Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##