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## Maine Health Alert Network (HAN) System

# **PUBLIC HEALTH ADVISORY**

To:	Health Care Providers
From:	Dr. Isaac Benowitz, State Epidemiologist
Subject:	Carbon Monoxide Alert for Health Care Facilities
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### **Carbon Monoxide Alert for Health Care Facilities**

Hospital emergency departments, emergency medical services, and outpatient providers should be on alert for carbon monoxide (CO) poisonings. The Maine Center for Disease Control and Prevention (Maine CDC) is investigating 18 reports of CO poisoning from eight separate incidents linked to improper generator use after the recent storm. CO poisoning is a reportable condition in Maine and these events have been reported to the Maine CDC. The Maine CDC investigates cases of suspected CO poisoning to identify exposure risk factors and improve outreach efforts to prevent further poisonings.

All of these CO poisonings are due to improper operation of gasoline-powered generators such as operation in enclosed spaces like garages or basements. As single portable gas-powered generator can produce as much deadly CO gas as 100 idling cars. Improper use of portable gas-powered generators in enclosed or partially enclosed spaces can quickly cause CO poisoning, which can be fatal.

#### Carbon monoxide poisoning was made a notifiable condition in April 2008.

All cases with clinical signs, symptoms, or known exposure consistent with diagnosis of carbon monoxide poisoning, and/or a carboxyhemoglobin level equal to or above 5% are reportable to the Maine CDC. Carbon monoxide poisoning is a Category II notifiable condition: report carbon monoxide poisonings within 48 hours. Use the same disease reporting lines as used for all notifiable conditions: 1-800-821-5821 (phone); 1-800-293-7534 (fax). Prompt reporting is strongly encouraged.

#### **Alert for Hospital Emergency Departments**

Carbon monoxide poisoning shares many of the same symptoms of the flu, but without the fever. In a study of the outbreak of CO poisoning following the 1998 ice storm, the most common presenting symptoms of CO poisoning were headache (69% of cases), nausea (51%), dizziness (48%), fatigue (31%), vomiting (21%), chest pain (9%), shortness of breath (6%), and loss of consciousness (81%). These symptoms were associated with blood carboxyhemoglobin (COHb) levels ranging from 2% to 50% with a median of 14%.<sup>1</sup> Some individuals with elevated COHb levels were asymptomatic and were identified because another household member had symptoms. Background COHb levels in nonsmokers is typically under 2% and for otherwise healthy smokers is under 9%.

Any questions regarding the management of cases of carbon monoxide poisoning should be referred to the Northern New England Poison Control Center at **800-222-1222**.

#### FOR MORE INFORMATION, PLEASE CONTACT:

Andrew Smith, SM, ScD, State Toxicologist, 207-287-5189

<sup>&</sup>lt;sup>1</sup> Daley R, Smith, AE, et al., An Outbreak of Carbon Monoxide Poisoning After a Major Ice Storm in Maine, *J. Emerg. Med.*, Vol. 18 (1):87-93, 2000.