



UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, DC 20207

Memorandum

Date: August 16, 2006

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SUBJECT : Non-fire Carbon Monoxide Fatalities Associated with Engine-Driven
Generators and Other Engine-Driven Tools in 2002 through 2005

This memorandum provides an updated number of reported non-fire carbon monoxide fatalities associated with engine-driven generators and other engine-driven tools that occurred from 2002 through 2005¹. This memorandum includes fatalities reported as of June 1, 2006. These are preliminary counts of incidents for the time period covered since reporting is not complete for these years. An earlier memorandum titled "Incidents, Deaths, and In-Depth Investigations Associated with Carbon Monoxide from Engine-Driven Generators and Other Engine-Driven Tools, 1990-2004," dated December 1, 2005 included fatalities through December 31, 2004 and reported as of June 27, 2005. The criteria used to search the data for the December 1, 2005 memorandum and this memorandum are similar. The search criteria for non-generator engine-driven tools was expanded in an effort to capture other engine-driven tools that may not have been captured by the criteria used in the December 1, 2005 memorandum.

Fatality counts are provided in two separate tables. Table 1 provides fatality counts associated with a specific engine-driven tool. Table 2 provides additional fatality counts that could not solely be associated with an engine-driven tool since other possible carbon monoxide producing products were also in use at the time of death. In all but two of the fatalities summarized in Table 2, the additional product in use was a heating device – kerosene or propane heater or a wood burning stove. Of the two exception cases, one case involved both a running generator and vehicle in a closed garage. In the other case, there was a generator and heater running and possibly a second heater, propane lantern and/or gas camp stove in use. The data in Table 2 are

¹ This analysis was prepared by the CPSC staff, has not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

not included in Table 1 but are provided as additional information on carbon monoxide fatalities where an engine-driven tool was a likely contributing factor.

Table 1: Reported Non-Fire Carbon Monoxide Fatalities Associated with Engine-Driven Tools: 2002 - 2005*

	2002	2003	2004	2005
All Engine-Driven Tools	48 (+1)	65 (+8)	49 (+9)	73
Generators	43 (+1)	56 (+5)	42 (+7)	64
Other Engine-Driven Tools	5 (0)	9 (+3)	7 (+2)	9
Air Compressor	0	0	1 (+1)	0
Concrete Saw	1 (0)	0	1 (+1)	0
Lawn Mower/Tractor	4 (0)	6 (+2)	5 (0)	6
Paint Sprayer	0	1 (+1)	0	0
Pressure Washer	0	0	0	1
Snow Blower	0	0	0	1
Welder	0	2 (0)	0	1

* Fatality counts are those reported to CPSC as of 6/1/2006. Parenthetical counts are the additional reported fatalities received by CPSC and added to those reported in the December 1, 2005 memorandum.

Table 2: Reported Non-Fire Carbon Monoxide Fatalities Associated with Engine-Driven Tools Used in Conjunction with Another Possible Carbon Monoxide Source: 2002 - 2005*

	2002	2003	2004	2005
All Engine-Driven Tools	6	6	2	6
Generators	5	5	1	6
Other Engine-Driven Tools	1	1	1	0

* Fatality counts are those reported to CPSC as of 6/1/2006.

Search Criteria Used to Identify Relevant Cases

Databases Searched: DTHS, INDP, IPII, NEISS

Incident Dates: 1/1/1990 – 12/31/2005 (reported as of 6/1/2006)

Product Codes: 113-115 Floor Buffers, Rug Shampoos, Vacuum Cleaners
 606 Generators
 800-896 Shop and Construction Equipment
 1062 Tractors, Other or Not Specified
 1400-1464 Lawn and Other Outside Equipment

Text Search: "CO_" or "CARB" or "MONO"