

论文

## 辽宁省非职业性一氧化碳中毒气象预报方法

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**摘要** 利用统计学方法, 对2003年11月至2007年3月辽宁冬季采暖期的气象资料进行普查, 分析可能引发非职业性一氧化碳中毒事件的天气形势和气象条件。结果表明: 不利于一氧化碳扩散的主要天气因子包括存在混合层且混合层高度较低、地面风速小、空气湿度大等。根据普查结果并借鉴了大气污染潜势预报等级划分标准, 将非职业性一氧化碳中毒气象条件潜势预报分为五级, 其中五级为最严重级别。结合高等级(四级和五级)天气实况和烟、霾和雾等不利于污染物扩散的天气现象出现日期对天气环流形势进行了普查, 得出4种主要的天气环流型。利用2007年11月至2008年3月辽宁冬季采暖期实况资料对预报等级标准和天气形势场分型进行检验, 结果显示本预报方法所定义的等级划分标准以及天气形势场分型具有实际业务应用价值。

**关键词** [非职业性一氧化碳中毒](#) [气象条件](#) [等级划分](#) [环流分型](#) [预报检验](#)

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## Meteorological forecast method on non-occupational carbon monoxide poisoning in Liaoning province

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**Abstract** Meteorological data from November 2003 to March 2007 (heating period of northeast China) were surveyed by statistic method in Liaoning province. Synoptic situations and meteorological conditions that maybe lead to a non-occupational carbon monoxide (CO) poisoning case were analyzed. The results show that the meteorological factors making CO diffusion difficult include the existing mixed layer and the lower mixed layer height, the lower surface wind speed, and the higher humidity etc. According to the general survey results and standard of air pollution potential forecast, potential forecast of meteorological conditions on non-occupational CO poisoning are divided into five grades. The fifth grade is the most serious. Four atmospheric circulation types are summarized based on the general survey results such as the real weather of forth and fifth grades, the date of appearing smoke, haze and fog. Forecast grade and classification of weather situation are verified by the real data from November 2007 to March 2008. It indicates that this forecast method is better.

**Key words** [Non-vocationally CO poisoning](#) [Meteorological conditions](#) [Grading standard](#) [Circulation types](#) [Verification](#)

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