

Tobacco Smoke Tied To Respiratory Problems In Kids

TORONTO (CP) - Exposure to tobacco smoke appears to be a much greater factor in childhood respiratory illness than exposure to air pollution, a 10-year study by Hamilton researchers suggests.

In fact, air pollutants tested showed little or no effect on most respiratory conditions, and only slight effects on lung function, says David Pengelly, an associate professor of medicine and engineering physics who headed the McMaster University study.

About 3,500 children aged seven to 10 participated in the project, Pengelly told a meeting of the Lung Association of Ontario on Friday. The children were from schools across Hamilton - a heavy-industry city about 20 kilometers wide - where pollution levels range from “relatively high to relatively low.”

The study, based on questionnaires and lung-function tests, looked at a number of factors, including air pollutants, whether parents smoked and family respiratory history.

Non asthmatic respiratory illnesses, such as phlegmy coughs that lasted more than three weeks, “were primarily associated with second-hand smoke, particularly with maternal smoking.”

Pengelly said mothers’ smoking seems to have more effect because young children generally spend more time with their mothers than their fathers.

“And the likelihood that a child will later begin smoking is twice as high if his mother smokes,” Pengelly said.

Lung function tests of children - they were tested five times over eight years - also linked parental smoking to reduced airflow as children grew older.

The study found the prevalence of asthma in children was also associated particularly with maternal smoking.

Air pollution played a small role, he said. The common pollutant sulphur dioxide doesn't appear to increase the incidence of asthma in children, but higher levels do cause more severe symptoms in those who already have the disease.

Hamilton records a maximum annual level of 17.5 parts per billion of sulphur dioxide, a figure below Ontario's acceptable maximum of 20 parts per billion, he said.