Air pollution death toll to soar

Canadians might want to consider wearing masks as they move about their daily chores after a Canadian Medical Association study indicated that 21,000 citizens will die this year as a result of the effects of air pollution.

That will rise to 39,000 by 2031, by which point the economic costs of air pollution will rise to $18 billion from $8 billion, according to the report, released Aug. 13, 2008, and entitled “No Breathing Room: National Illness Costs of Air Pollution.”

The cumulative totals by 2031?

Roughly 800,000 dead and an economic cost of $250 billion.

The extrapolations, based on a set of algorithms developed by a team of university researchers for the Ontario Medical Association in 2000, also indicate that over 9000 hospital visits, 30,000 emergency department visits and 620,000 visits to doctors’ offices this year will be due to air pollution.

CMA Technical Advisor on Health and the Environment Dr. Ted Broadway says the national algorithms are based on the combined health effects and economic costs of 2 pollutants: ozone and particulate matter. Arguing that the methodology can withstand any measure of scrutiny, Broadway says that, if anything, it underestimates the impact of chronic diseases.

Limitations would include the lack of uniform provincial submissions to the Canadian Institute for Health Information, whose data was used to derive the staggering findings.

The Illness Costs of Air Pollution software, downloadable at www.cma.ca, allows Canadians to forecast the health damages of air pollution on a provincial (or even down to a census division) level.

All levels of government were apprised of the massive amounts of money that will be needed, Sher says, noting that Australia recently invested $150 million to bolster its system, while the UK funnelled £7 million into its regime.

The first step in developing the requisite mechanisms will be the national conference to be held in Ottawa in September 2008. It will address a range of policy issues, including standardization of consent policies, mandatory hospital reporting of ICU or emergency department deaths and incentives for donation.

“Everything is on the table,” Sher says. “Certainly, my view, from Canadian Blood Services’ perspective, is that there are no sacred cows in there.

We need to challenge some of the long-held assumptions that things are better done at a provincial program level and ask the question about whether it is better done nationally.” — Wayne Kondro, CMAJ

Briefly

Diagnostic imaging: There’s been significant growth in the number of magnetic resonance imaging (MRI) and computed tomography (CT) scanners in Canada over the past 4 years but the number of medical imaging professionals has remained relatively constant, according to the Canadian Institute for Health Information. There were 419 CT scanners and 222 MRI machines installed and operational in Canada in 2007, as compared to 325 and 149, respectively, in 2003. Despite the increases, Canada, at 12 CT scanners and 6 MRIs, still falls below the Organisation for Economic Co-operation and Development medians (15 and 7) for imaging machines per million population, says the report (www.ciihi.ca). The number of medical radiation technologists rose to 16,461 in 2006 from 15,289 in 2003.

Revalidation: In a bid to raise the practice bar, the Chief Medical Officer for England Sir Liam Donaldson has unveiled a new regulatory system (www.dh.gov.uk) that will obligate the United Kingdom’s 150,000 doctors to face mandatory annual competence tests in which they’ll be assessed on such factors as prescribing habits, diagnostic skills and personal problems, like alcohol or drug abuse. Under the regime, senior doctors will be appointed in each region to assess the competence of general practitioners. Patients will also be consulted about that doctor’s communication skills and willingness to involve them in decision-making about their treatment. The annual appraisals will serve as fodder for determining whether family doctors, hospital consultants and private practitioners are fit to practise when they apply for licence renewal every 5 years.

Shorter stays: Patients with mental illnesses admitted to a general hospital typically spent just 16.4 days in the facility in fiscal year 2005/06 before being discharged, as compared to 36.2 days in fiscal year 2000/01, according to the Canadian Institute for Health Information. Reduced inpatient hospital use also held true for patients in psychiatric hospitals, according to the report (www.ciihi.ca). Over the same time period, average length of stay in psychiatric hospitals (outside of Quebec, which is not included in the calculations because of a data quality problem) dropped to 100.3 from roughly 160 days. — Wayne Kondro, CMAJ