

practitioner uses it “to keep abreast of quickly changing information and for patient counselling.” A physician from Manitoba commented that the journal provides “an opportunity for Canadian doctors to communicate with each other on a national scale.” A Canadian research technician wanted “more reports on nutrition” and a medical student from British Columbia wanted “a section on medical students and issues related to them.”

Indeed, if the people who completed this year’s survey are any indication, *eCMAJ* users are a diverse, demanding and opinionated bunch of people — which is just what we expected. (Full results are posted at [www.cma.ca/cmaj/about.htm](http://www.cma.ca/cmaj/about.htm).) — *Jennifer Douglas, CMAJ; Shelley Martin, CMA Research Directorate*

## Saskatoon firm wins country’s first contract to cultivate medical marijuana

Besides its proven plant-producing prowess, the company recently awarded Health Canada’s first-ever contract to produce marijuana offered a measure of security its competitors couldn’t match.

Prairie Plants Systems Inc. of Saskatoon will be growing the required ton of research-grade pot 360 m underground in a mine with only 1 entrance. The biotechnology firm, which beat out 34 competitors to win the 5-year, \$5.75-million contract, has been growing pharmaceutical plants in an unused section of a mine at Flin Flon, Man., since 1990. The underground greenhouse, which is monitored and controlled by computer, has proven to accelerate plant growth.

In addition to growing, drying and processing the plants, the company will also roll more than a million marijuana cigarettes. They will be used to conduct research into the drug’s risks and benefits, and will be given away to Canadians who qualify, on medical grounds, for a legal exemption to possess marijuana; about 140 people are currently qualified. In return, says a Health Canada spokesperson, these people must provide the department with “information for research purposes.” In September the federal government announced it was looking at changing existing laws governing the use of marijuana for medicinal purposes. — *Greg Basky, Saskatoon*

## The epidemiology of murder: UK physician responsible for 345 deaths?

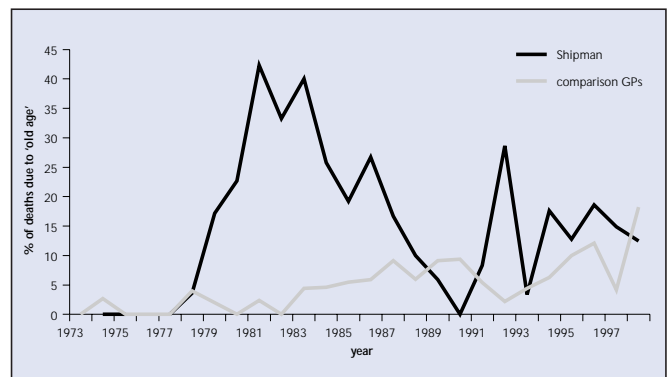
Harold Shipman, a seemingly dedicated and congenial British GP, is now characterized as the world’s most prolific serial killer, responsible for the deaths of as many as 345 of his patients.

A year ago, the Leeds University graduate was convicted of murdering 15 patients. Now a 156-page audit assessing the medical certificates of cause of death (MCCD) during his 24-year career reveals an excessive death rate, particularly among older female patients. The suspicious deaths date to 1975. The audit ([www.doh.gov.uk/hshipmanpractice/shipman.pdf](http://www.doh.gov.uk/hshipmanpractice/shipman.pdf)) was released Jan. 5 by the UK Department of Health. It compared the medical records, death certificates and cremation forms of Shipman’s patients with those of comparable local GPs.

Shipman started general practice at Todmorden, West Yorkshire, in 1974. A year later he was convicted of dishonestly obtaining drugs when his practice partners noticed he was signing prescriptions for meperidine that his patients weren’t receiving. Shipman paid his fine and worked 2 years as a clinical medical officer before resuming general practice in 1977. He practised in a group setting in Hyde until 1992, when he entered solo practice.

Shipman’s crimes first came to light in 1998 when a local GP contacted the coroner about what he saw as an unusual number of deaths. A local undertaker also voiced suspicions, but there was insufficient evidence for police to proceed. When the former mayor of Hyde, Kathleen Grundy, died suddenly on June 24, 1998, her daughter, a lawyer, contacted police. Grundy, 81, had bequeathed Shipman £350 000 in her will. Within 3 months, the GP was charged with murder and bodies of ex-patients were being exhumed. By February 1999 he had been charged with the murder of 15 former patients; within a year he was convicted and is now serving 15 life sentences.

But the audit means the case doesn’t end there. Richard



The percentages of cases certified as caused by old age by Shipman and by the physicians he was compared with, 1973–98 (UK Department of Health audit report)

Baker, the Leicester University professor and quality-of-care expert who conducted the audit, concluded that more than half the patients who died under Shipman’s care after 1985 were murdered.

During his career, Shipman issued a total of 521 MCCDs; over the same period the highest number issued by another Hyde doctor was 210. As well, Shipman was 25 times more likely than comparable GPs to be present at time of death — attending in 20% of cases compared with a norm of 0.8%. Relatives were present at 40% of his patients’ deaths, compared with 80% for other doctors.

Baker made several recommendations, including monitoring death rates, but the UK’s chief medical officer, Liam Donaldson responded: “Everything points to the fact that a doctor with the sinister and macabre motivations of Harold Shipman is a once-in-a-lifetime occurrence.” — *Barbara Sibbald, CMAJ*