

ditional doctors and technologists would be required to run all the new equipment required, O'Brien points out. But he believes the solution to the issue is likely to be a blend of existing nuclear medicine and regional PET capability, as well as switching to reactors that produce low-enriched uranium.

O'Brien agrees with Physicians for Global Survival that using low-enriched uranium is a possibility and says the Maple II reactor could be converted to a low-enriched core. "It's worth exploring," he says. "We do have the issues of 2 old reactors (at Chalk River and in the Netherlands) so we do need a solution within the next 3 years to get us over the hump until we get to the next generation of technology."

Dr. Nancy Covington, past president of Physicians for Global Survival, said the group wants doctors to be aware of the issues involved in producing medical isotopes and to explore alternatives.

"We recommend that health care professionals explore nonionizing and nonreactor based ionizing radiation im-

aging technologies, and also explore the feasibility of avoiding ionizing radiation altogether, or utilize nonreactor isotopes," she says.

Covington points to principles drafted by International Physicians for the Prevention of Nuclear War, which call on clinicians to use ultrasounds, MRIs, PET scans or conventional radiographs whenever they serve patient care. "One of the viable solutions would be to see if there is a will so the Maple II reactor can be converted to a low-enriched core."

Edwards also told the conference that although technetium-99m has a half-life of just 6 hours, it breaks down into technetium-99, an element that remains radioactive over a half-life of more than 200 000 years. The element still poses a hazard through beta radiation when it is expelled from the body through urine and ends up in sewer systems and rivers, he added. — Laura Egertson, CMAJ

DOI:10.1503/cmaj.090798

Briefly

Health funding: Canadian spending for health research and development fell \$276 million to just over \$6 billion in 2006, according to Statistics Canada. With the exception of a small spike in 2005, health research funding was essentially unchanged over the 5-year period ending in 2005, states the report *Science Statistics: Estimates of Total Spending on Research and Development in the Health Field in Canada, 1997 to 2008*. Spending intentions for 2008 are projected at \$6.2 billion.

Youth cancer rates: The incidence of epithelial cancers is rising among young Canadians, largely as a result of more diagnoses of thyroid cancer among young women, according to the Canadian Cancer Society. Thyroid cancer rates among females aged 15–29 are 4 times that of male counterparts and account for 19% of all new cancer diagnoses in young women, states the report, *Canadian Cancer Statistics 2009*. That's primarily attributable to improved diagnostic practices and imaging technologies, which allow doctors to better detect the cancer in its early stages.

Green card: Females aged 11–26 emigrating to the United States must now be vaccinated against human papillomavirus before they can become permanent, legal residents. The requirement was recommended by an immunization advisory committee to the Centre for Disease Control and Prevention, says Chris Rhatigan, a spokesperson for United States Citizenship and Immigration Services. — Claire Biddiscombe, Ottawa, Ont.

DOI:10.1503/cmaj.090735