

## PREVENTION UPDATE

### Smoking

Smoking is the most preventable cause of lung cancer and harms anyone in the near environment. In 2009, 20 per cent of adult Canadians were smoking, with provincial rates varying from a low of 16 per cent in British Columbia, up to 22 and 23 per cent from Quebec all the way to Newfoundland and Labrador. The territories are terrifying, with smoking rates of 36 per cent in the Yukon and NWT, but a jaw-dropping 61 per cent in Nunavut. In subsets, males are smokers more often than women in each province or territory. Excluding the territories for a moment, merely because the numbers betray a phenomenon more diverse than tobacco alone, males in Alberta, Nova Scotia and Newfoundland and Labrador are smoking more than anyone in the country, at rates of 26 and 27 per cent.

Smoking rates have dropped, slowly, for decades. All it took was decades of aggressive anti-tobacco campaigns, massive amounts of public education and health promotion, numerous controls on the marketing of tobacco products, frequent price increases for tobacco products, smoking bans extending out from restaurants and bars to all public buildings, transit systems, parks, entire communities. The vigilance and creativity of the anti-tobacco movement is impressive, as is the commitment by most governments to deny a safe haven to a lit cigarette. Alberta and Quebec are the only provinces that have not introduced legislation for smokeless cars when children are present. Newfoundland and Labrador will implement the ban in May, 2011.

With all this activity, so clearly focused on one goal, why is one out of every five Canadians still smoking? Why is the smoking rate for teenage girls increasing and the overall rate for all adults apparently levelling off?

There may be answers in the unique resistance of some smokers to standard quit techniques. Perhaps a more formalized program of counselling and medical intervention is needed, but are physicians ready for this role? Perhaps a more stringent regulatory environment is appropriate, or more targeted health promotion messages, perhaps a more tailored form of government spending to reach the resistant smoker. This year the CACC will pursue the subject in the search for evidence-based solutions that are relevant to the dilemma.

## RARE CANCERS UPDATE

### Orphan Drugs

Ontario and Alberta each have an established framework for dealing with rare diseases but no other Canadian jurisdiction has taken that step. In a standard drug review, where each province tries to decide whether a new drug is important, effective and affordable, there are fairly rigid rules about the extent and quality of evidence that must be delivered before a drug can be considered a worthwhile expenditure.

However, rare diseases are exactly that and there are an insufficient number of patients to run the full-scale clinical trials that are common to research on other diseases. With incidence rates in the single digits per 100,000 or even 200,000 people a rare cancer is hard to diagnose, hard to put in front of the rare clinician who knows it well, and hard to explain. The trials are small and often deemed unconvincing. Furthermore, the discovery of a treatment for any of the rare diseases is likely a breakthrough, which can cause the trial to be suspended for ethical reasons – it is improper to withhold an effective drug from the control arm of the trial.

In short, the usual standards and processes stack against a new, orphan drug. It is for this reason that two provinces developed a special policy to consider more relevant criteria for these drugs reviews. Otherwise the new orphan drugs fail the reviewers' analysis and are rejected.

The pan-Canadian Oncology Drug Review (pCODR) is a new review process initiated by the provinces and territories to conduct expert reviews and provide recommendations on the clinical merits and cost-effectiveness of a new cancer drug. The provinces then have common, expert advice on which to base their funding decisions. If pCODR had a rare cancers policy, the entire nation would reap the benefits of an insightful analysis of these orphan drugs. But that is not the case. As it stands, only two provinces will be able to sensibly evaluate the merits of such products.

For a disease like cutaneous T-cell lymphoma, that strikes approximately one person out of 150,000 the inability to count on a drug review process that knows your disease can be unnerving. Cutaneous T-cell lymphoma is a general term for many lymphomas of the skin. There are no proven causes, but the usual arsenal of cancer weapons is applied, including radiation and chemotherapy along with ultraviolet light and topical treatments. A new treatment option is, to say the least, welcome.

It is encouraging to hear that Ontario will spur the other provinces into a common rare diseases policy, allowing all jurisdictions to benefit from the analyses already conducted and the expert recommendations for a new set of best practices in these special reviews. The test will be whether orphan drugs survive or fail the new pCODR process.