

## At A Glance

October 2005

### Monthly highlights of ICES research findings for stakeholders

#### ICES report identifies most at-risk groups for injuries in Ontario

Macpherson A, Schull M, Manuel D, Cernat G, Redelmeier D, Laupacis A. *Injuries in Ontario. ICES Atlas*. Toronto: Institute for Clinical Evaluative Sciences; 2005.

<b>Issue</b>	Injuries remain the leading cause of death among young people in Canada and place a heavy burden on the health care system, despite the fact that many injuries are predictable and preventable.
<b>Study</b>	Assessed emergency department (ED) and hospital utilization, between April 2002 and March 2003, to examine a variety of issues related to injuries in Ontario.
<b>Key Findings</b>	On average, someone visits an ED every 30 seconds and someone is hospitalized every 10 minutes in Ontario due to an injury, translating into more than 1.2 million injury-related ED visits and over 62,000 injury-related hospitalizations during the study period. People aged 15-24 years and over 65 years are at greatest risk of injury compared to those aged 25-65 years. The overall injury rate among men is higher than for women. Rates for injury-related ED visits and hospitalizations are higher in rural and remote areas compared to suburban areas, and in areas of lower socioeconomic status (SES) compared with higher SES areas.
<b>Implications</b>	A comprehensive population-based approach to increase awareness to injury prevention is needed, coupled with prevention strategies targeted toward specific high-risk populations.

#### Heart failure patients at highest risk of death are least likely to get drug treatment

Lee D, Tu J, Juurlink D, Alter D, Ko D, Austin P, Chong A, Stukel T, Levy D, Laupacis A. Risk-treatment mismatch in the pharmacotherapy of heart failure. *JAMA*. 2005; 294 (10): 1240-1247.

<b>Issue</b>	Failure to treat high-risk heart failure patients with life-sustaining therapies could adversely affect outcomes. Previous studies have not evaluated whether the tendency to receive such treatment is directly or inversely associated with the risk of death in heart failure patients.
<b>Study</b>	Tracked 1,418 heart failure patients, 79 years of age or younger, who were discharged from hospital in Ontario between 1999 and 2001 to examine the number of high-, intermediate-, and low-risk patients prescribed angiotensin-converting enzyme inhibitors (ACEIs), angiotensin receptor blockers (ARBs), or beta-blockers at hospital discharge and 90 days following hospital discharge.
<b>Key Findings</b>	The prescription rates of ACEIs, ARBs and beta-blockers was lowest in heart failure patients with a high risk of death, both at hospital discharge and within 90 days following hospital discharge, demonstrating an inverse association with risk. The pattern of lower rates of drug administration in those patients at increasing risk was maintained up to one year post-discharge.
<b>Implications</b>	The benefits of these medications in treating heart failure patients are well established. Understanding the reasons underlying this mismatch may facilitate improvements in care and outcomes for patients with heart failure.

#### Some stroke outcomes are worse for women than for men

Kapral M, Fang J, Hill M, Silver F, Richards J, Jaigobin C, Cheung A. Sex differences in stroke care and outcomes: results from the Registry of the Canadian Stroke Network. *Stroke*. 2005; 36 (4): 809-814.

<b>Issue</b>	Stroke is an important cause of death and disability in women as well as men, but little is known about gender differences in stroke care and outcomes.
<b>Study</b>	Examined data from the Registry of the Canadian Stroke Network (RCSN) on 3,323 stroke patients (1,527 women and 1,796 men) seen at acute care hospitals across Canada between July 2001 and December 2002 to compare stroke presentation, management, and six-month outcomes between women and men.
<b>Key Findings</b>	Relative to men, women with stroke were slightly older, had a slightly longer length of stay in hospital, were more likely to be discharged to a long-term care facility, and had slightly reduced functional status at six months after stroke. However, there were no striking gender differences in stroke presentation or severity, in hospital management, or in six-month mortality or quality of life.
<b>Implications</b>	These results confirm the personal and societal burden of stroke in women, and can help guide future efforts to explore the reasons and potential solutions to these differences in outcomes.

## Study outlines what attracts urban- and rural-raised family physicians to rural practice

Chan B, Degani N, Crichton T, Pong R, Rourke J, Goertzen J, McCready B. Factors influencing family physicians to enter rural practice: does rural or urban background make a difference? *Can Fam Physician*. 2005; 51 (September): 1246-1247.

<b>Issue</b>	The most influential factors in family physicians' decisions to practice rural medicine, and how these factors differ depending on whether physicians were raised in rural or urban areas, has not been well documented.
<b>Study</b>	Surveyed 651 rural family physicians who graduated from a Canadian medical school between 1991 and 2000, and were practicing in 2002, to examine where they grew up; at what point during their training they became interested in rural practice; what factors influenced their decision to practice rural medicine; and, what the differences were between these measures by rural versus urban upbringing.
<b>Key Findings</b>	Many doctors currently working in rural areas grew up in larger cities. Rural training has a more pronounced impact on the decision to enter rural practice for urban-raised than rural-raised physicians. Both urban-raised and rural-raised physicians are attracted by the challenges of rural practice and the rural lifestyle. Financial incentives play a relatively small role in getting physicians to work in rural areas.
<b>Implications</b>	Although rural-raised physicians are more likely to practice in rural areas, urban-raised physicians will remain the main source of family physicians for rural communities until more rural-raised persons can be recruited into medical schools. Training programs offer an important opportunity to recruit physicians raised in urban areas to rural practice.

## Antipsychotic use in the elderly up 35%, but costs up 749%

Rapoport M, Mamdani M, Shulman K, Herrmann N, Rochon P. Antipsychotic use in the elderly: shifting trends and increasing costs. *Int J Geriatr Psychiatry*. 2005; 20 (8): 749-753.

<b>Issue</b>	Antipsychotics are increasingly being used to treat elderly people with dementia, particularly with the introduction of newer atypical antipsychotics in the late 1990s, and policy-makers are struggling to fund these expensive therapies. Specific antipsychotic drug use and cost information is needed prior to conducting a comprehensive cost-effectiveness analysis.
<b>Study</b>	Tracked trends in typical and atypical antipsychotic prescribing patterns, and their use and cost, between 1993 and 2002 for more than 1.4 million elderly community-dwelling Ontarians aged 65 years and over.
<b>Key Findings</b>	The number of elderly Ontarians using antipsychotics increased by 35% over the study period, from 2.2% at the beginning of 1993 to 3.0% at the end of 2002. This modest increase was associated with a 230% increase in antipsychotic prescriptions (from 308,149 in 1993 to 1,015,450 in 2002) and a 749% increase in total cost (from \$3.7 million in 1993 to \$31.4 million in 2002). Atypical antipsychotics made up 83% of the antipsychotics dispensed and 95% of antipsychotic drug costs by 2002.
<b>Implications</b>	As the population ages and more people develop dementia and are treated with antipsychotics, in particular expensive atypical antipsychotics, there needs to be a clearer understanding of the benefits and harms of these medications, as well as the cost implications.

### For more information contact:

Paula McColgan, Vice-President, Policy and External Relations, ICES  
(416) 480-6190 or [paula.mccolgan@ices.on.ca](mailto:paula.mccolgan@ices.on.ca)