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Risk of compromised wounds greater among patients with diabetes, CIHI study shows

Hospital patients with diabetes are almost six times more likely to have compromised wounds as other patients, according to an Aug. 29 report from the Canadian Institute for Health Information (CIHI).

Wounds that do not heal properly, often due to infection, including wounds due to arterial or venous insufficiency, pressure ulcers, cellulitis and troublesome postsurgery wounds, are a common problem throughout the health care system, although they afflict people with diabetes disproportionately. According to the report, *Compromised Wounds in Canada*, many of these wounds are preventable, or can be mitigated with early detection.

The report, which examined health records from 2011–2012, states hospital patients with diabetes have twice the risk of infection following surgery, and are almost 40 times more likely to develop wounds due to poor circulation. Diabetes increases the likelihood of developing wounds because the disease compromises blood flow and reduces sensation. Conditions such as diabetic foot, however, can often be prevented, or at least detected early and treated.

“The good news is that we know that they’re a high-risk group and we can watch for it,” says Kathleen Morris, CIHI’s director of health system analysis and emerging issues.

In 2012, 6.5% of Canadians had diabetes, according to [Statistics Canada](http://www150.statcan.gc.ca/n1/pub/82-625-x/2013001/article/11831-eng.htm), and experts agree that rate is climbing.

“The severe cases are unfortunately not that rare,” says Morris. More than 2000 people with diabetes had foot amputations in 2011–2012. Many of these amputations were likely preventable, Morris says.

Diabetes rates in First Nations communities are much higher than those in non-Aboriginal populations. Diabetes-linked wounds are a substantial problem among these patients who often have limited access to health care.

Overall, every health care setting has a problem with compromised wounds, the report states. In acute care settings, 4% of patients have compromised wounds. In home care facilities 7% of patients have compromised wounds, a figure that rises to 10% for patients in long-term care, and 30% among those in hospital-based continuing care.

Patients over 75 years had a lower prevalence of compromised wounds than those aged 65 to 74, a finding that Morris calls “surprising.”

“We often think of age as a risk factor for many conditions, including compromised wounds,” she says. She speculates that this may be because patients with conditions that predispose them to compromised wounds, which include diabetes, heart and lung disease, and cognitive disorders, are not living as long as others. — Catherine Cross, *CMAJ*

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