

Concussions strike 1 in 5 teens and may lead to lower grades: study

St. Michael's Hospital researchers say more study is needed to sort out possible links to poor grades and substance abuse.

By: [Andrew Livingstone](#) News reporter, Published on Tue Jun 25 2013

The high rate of concussions among Ontario students and its relationship to lower grades and substance abuse is something that needs to be studied further, according to a study released Tuesday.

Concussions among Ontario students in Grades 7 to 12 are more common than originally thought, according to researchers at St. Michael's Hospital. And students who suffer these head injuries are more likely to have lower grades and use drugs and alcohol.

Surveying nearly 9,000 students who completed the 2011 Ontario Student Drug Use and Health Survey, the study found that one in five had experienced a concussion that left them unconscious for five minutes or required them to be hospitalized overnight.

Nearly 6 per cent of students surveyed experienced a concussion in the previous year.

"They call it a silent epidemic," said Dr. Gabriela Ilie, lead author of the study and a post-doctoral fellow at St. Michael's Hospital. With an arm injury, there is a cast around your arm and it's a cue that it needs to be taken care of, she said, "but a head injury, there is nothing to indicate, to alert you or others, that something has happened that deserves the same respect and care."

Nearly 60 per cent of reported injuries were caused by playing hockey or soccer. The perception of head injuries among youth needs to change, she added.

"If your son hit his head in a hockey game, you don't push him back into the game the next day," Ilie said.

Students who had used alcohol or cannabis in the previous 12 months were also more likely to have sustained a concussion. That statistical link suggests the need to look more closely at the relationship, Ilie said.

"There's evidence out there indicating that if you have multiple concussions, long-term, you're more likely to have cognitive impairments and substance abuse problems," she said.

Students who experienced a head injury were four and a half times more likely to drink alcohol regularly than to be an abstainer, the study revealed — and three times more likely to use marijuana (10 or more times a year) than to avoid it entirely.

The use of alcohol and drugs could be prompted in some way by the head injuries, Ilie said, perhaps as a coping mechanism for students struggling because of the injury. However, the relationship is merely statistical at this time, she added, and more research is needed to determine causes.

"Their brains are still developing (and) we want them to stay as healthy as possible," Ilie said. "If we know who is more vulnerable, we can do something about it."