THE
FACTS ON
EDUCATIONCannabis: What are
the risks for students?

There are several unique risks that have emerged over the past few years associated with cannabis use among adolescents. As our understanding of the development of the human brain has increased, so too has the potency of THC – the main psychoactive component in cannabis – which has increased by up to 400% over the past fifty years. Science has explored how this increase in potency could potentially impact brain development among our student-aged population, which continues until their mid-twenties. Although rates of cannabis use among youth ages 15-24 in Canada continue to decrease, approximately 25% reported having used cannabis with the average age of initiation being 14 years-old. We cannot yet conclude how cannabis legalization for adults in Canada will impact youth consumption, but data from Washington and Colorado have *not* shown a significant increase in cannabis use among those under the U.S. legal age of 21.

Here are three major risks associated with adolescent cannabis use:

1. LOWER SCHOOL PERFORMANCE

Studies have shown that an individual's working memory is impacted by cannabis use, with the effects potentially lasting for several days. This could impact a student's academic performance and cause them to fall behind. As well, unlike alcohol, there is evidence that the effects of cannabis can persist over years of regular and continued use. These include the potential for a lowering of inhibition and reasoning skills, and a reduction in memory performance. Research has also shown that regular cannabis use could result in lower levels of educational attainment, including lowering high school graduation rates.

2. PSYCHOSIS

Cannabis use can result in psychotic episodes, where some youth lose touch with reality. These effects can last anywhere from a few hours to a few days, but do eventually resolve. However, in instances where heavy or frequent use is combined with beginning cannabis use at a younger age, there can be as much as a twofold increased risk of developing a chronic psychotic disorder, especially where there is a family history of schizophrenia.

3. CANNABIS USE DISORDER (CUD)

One-in-six youth who experiment with cannabis will go on to develop Cannabis Use Disorder (CUD). This can result in a reduction in grades, increased conflict at home, and changes within the student's social circle of friends – with these changes often occurring over the course of a single year's time. According to research, approximately 3% of older male high school students have CUD.

While cannabis has a long history of human use, recent scientific findings have discovered more about the developing adolescent brain and specific areas that are vulnerable to cannabis. For adolescents who use cannabis daily or weekly, studies have pinpointed functional brain deficits that require them to compensate by working harder than those who are not regular users. Fostering an open-door policy and being non-judgemental can help begin important conversations with students on these serious risks.

For online resources and references please visit: **WWW.edcan.ca/facts-on-education Dr. Christina Grant,** Associate Professor and Associate Chair of Education, Department of Pediatrics, McMaster University

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