## Canada and 23andMe: Can direct-to-consumer tests facilitate genetics-based discrimination?

In Canada, direct-to-consumer DNA testing has fallen through the yawning chasm known as the constitutional division of powers. Health Canada says the service falls under the jurisdiction of the provinces, while the provinces show little interest in regulating testing that is done outside their borders (a spokesman for the Ontario ministry of health said they don't consider it their jurisdiction). No surprise, then, that 23andMe has ramped up efforts to market its genetic health service north of the border since the United States FDA clipped its wings. Canada, in the meantime, remains the only G8 country without some sort of law governing how genetic test results can be used by insurers and employers, despite warnings that people who receive bad news could face discrimination when they try to obtain coverage or get jobs.

All of which suggests the country is no more ready for the new era of genetic health testing than the thousands of Canadians on whom 23andMe has been dropping eye-opening and, in some cases, heartbreaking information. "This is being marketed as a fun thing to do," says Bev Heim-Myers, chair of the Canadian Coalition For Genetic Fairness, an organization advocating for legislation banning discrimination based on genetic test results. "But it can go from fun to devastating. This information can then be shared and used against the person. Until we have laws protecting genetic information, this is a dangerous thing."

We can't say we weren't warned. Long before the Human Genome Project charted almost all of the three billion base pairs of human DNA, ethicists and futurists sounded alarms about the potential misuse of genetic information, as testing became cheaper and more widely available. The term "genoism"—unethical discrimination based on genetics—was coined by Andrew Niccol, director of *Gattaca*, a 1997 movie that portrayed a society driven by eugenics rather than merit. The film's foresight, alas, proved greater than its cultural impact. Canada, for one, has been drifting for years toward the world it depicted.

Read full original article: D.Y.I. DNA: Genetic testing at home is risky business