

## SUICIDE AND THE ECONOMY

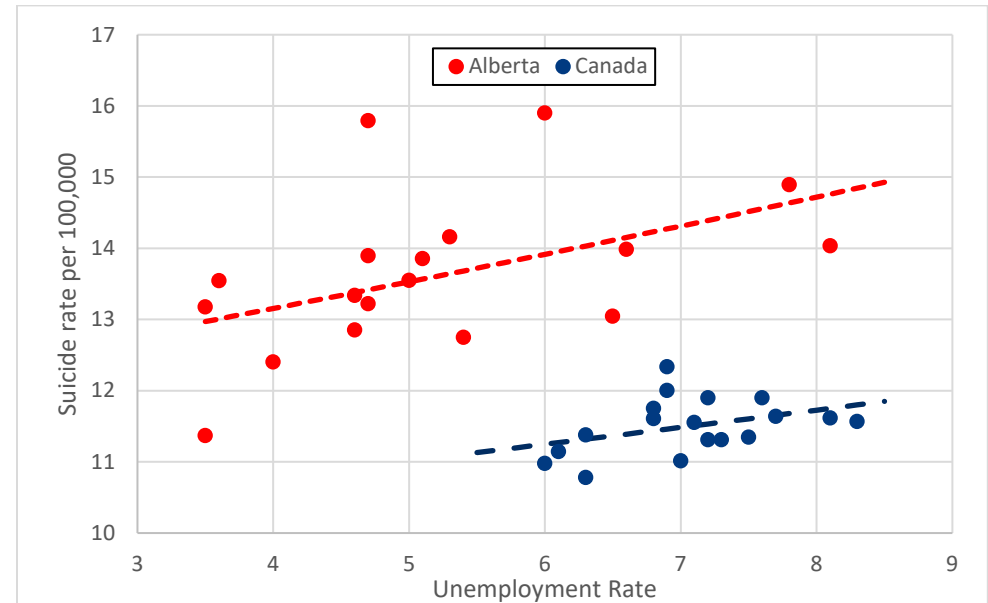
The rate of suicide rises with the unemployment rate. This is particularly so in Alberta where suicide rates are higher than the Canadian average.

The figure presents data from 2000 to 2017 showing, for Alberta and Canada, the relationship between the number of suicides per 100,000 people and the state of the economy as measured by the unemployment rate. The red dots show observations on the suicide rate and the unemployment rate in Alberta while the blue dots show the same for Canada as a whole. The dashed lines show the trend relating suicides and the unemployment rate in the respective jurisdictions.

Over this period, the suicide rate per 100,000 Albertans was considerably higher than the national average. In 2017, for example, Alberta's suicide rate of 14.9 per 100,000 people was higher than the rate in Canada (11.4) which was higher again than the rate in Ontario (10.1 per 100,000 people). Not shown in the graph but available from the data is the fact that in all provinces suicide rates for females are far lower than for males. A [study](#) released by Statistics Canada in 2012 cited research to suggest that this discrepancy is due to males tending to use more irreversible methods (such as hanging and firearms) than females and despite the fact women were 3 to 4 times more likely to attempt suicide. Suicide rates also vary by age and are noticeably higher for people aged 40-59 years.

The rate of suicide is much lower for females than for males and is much higher for people aged 40 to 59 years than for others.

Suicidal behaviour is recognized as the end-result of complex interactions of psychological, cultural and social factors that have impacted an individual. No single one of those factors have been found to be a necessary or sufficient cause of suicide. An economic downturn may contribute to an increase in suicides by adding to financial stress through



Source: Data on the number of suicides, population, and the unemployment rate are from Statistics Canada Tables 13-10-0801-01, 17-10-0005-01, and 14-10-0020-01, respectively.

loss of income and wealth, threatened mortgage foreclosures, and perhaps by contributing to increased social isolation. A recent [study](#) of recessions in Europe and North America confirms a significant relationship.

A simple analysis of the data presented in the graph shows that in Alberta a one percentage point increase in the unemployment rate increases the suicide rate by a statistically significant 2.8 percent ( $p = 0.05$ ). This sensitivity of the suicide rate to unemployment is somewhat larger than that in Canada as a whole, where a one percentage point increase in the unemployment rate increases the suicide rate by 2.1 percent ( $p = 0.10$ ). The Canadian response is also a somewhat less reliable estimate.

Recent [research](#) shows increased investments in the social welfare system can lessen the effects of economic downturns on rates of suicide. Those results suggest that the Alberta Mental Health Strategy introduced in 2011 and the Mental Health and Addiction Strategy of the City of Calgary introduced in 2019 may play useful roles in mitigating one of the more harmful effects of Alberta's economic downturns.