

The objective of the study is investigating the effect of binge drinking (5 or more alcoholic drinks in a single occasion) on the health outcomes: cancer, diabetes, arthritis, ulcers, and self-rated health. The health production model proposed by Grossman (1972) demonstrates the individuals faced with decisions in which there exist trade-offs between the current utility derived from current behaviors and the future utility from the health stock. The individuals act in the way that optimized the tradeoffs. Based on this framework, the prior works of literature examine the effect of health behaviors and health using the instrumental variable. They demonstrate that some health behavior such as smoking negatively affected the health while other, physical activity, positively influence the health. However, the lack of literature on alcohol bingeing on health is evident. This study will address the gap by estimating the frequency of binge drinking on five health outcomes using Two-Stage Least-Square (TSLS) regression with “Canadian Community Health Survey 2007 – 2012”. By using the presence of children under 12 and the alcohol privatization system of the province as instruments, the results show that binge drinking is associated with higher risk of the health outcomes. However, the associations between the binge frequency and health outcomes are nonlinear. Furthermore, different subpopulations (men versus women and age < 50 versus age  $\geq$  50) exhibit different relationship than the main analysis. Public policies of the alcohol bingeing are implicated in the study.