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**Epidemiology of Neurological and Cardiac Complications of COVID-19 among Ontario Visible Minorities: A Retrospective Study of Chinese and South Asian Canadians** 

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**Background:** This is a population-based retrospective study of neurological and cardiac complications of COVID-19 among Ontario visible minorities: Chinese and South Asian Canadians

**Methods:** From January 1, 2020 to September 30, 2020, using the last name algorithm, rates and types of cardiac and neurological complication of these two cohorts along with the general population in Ontario with COVID-19 were analysed by Institute of Clinical Evaluative Sciences.

**Results:** Preliminary results show that Chinese-Canadians (N= 1,186) with COVID-19 are older with a mean age of 50.74 years old compared to general population (N= 42,547) of 47.57 years old (P< .001), while South Asians (N= 3,459) have a younger mean age of 42.08 years old (P< .001). Total cardiac and neurological complication rates, hospitalization rates and ICU admission rates are all higher for Chinese-Canadians while they are lower in South Asians and all achieving statistical significance (P < .001). Overall mortality rate is significantly higher for Chinese-Canadians at 8.1% vs 5.0% general population (P < .001).

**Conclusions:** Chinese-Canadians with COVID-19 in Ontario were much older and have higher cardiac and neurological complication rates and overall mortality rate than the general population. These data have significant implications for proper prevention and appropriate management for these vulnerble elderly Chinese-Can