**EPIDEMIOLOGY OF COVID-19 AND ITS CARDIAC AND NEUROLOGICAL COMPLICATIONS AMONG ONTARIO VISIBLE MINORITIES: CHINESE AND SOUTH ASIAN CANADIANS**

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# Background

Due to lack of data on the epidemiology, cardiac and neurological complications among Ontario visible minorities: Chinese and South Asians, affected by COVID-19, this population-based retrospective study was undertaken to study them systematically.

**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 analyzed by ICES.

# Results

Preliminary results show that Chinese Canadians (N= 1,186) with COVID-19 are older with a mean age of 50.7 years compared to general population (N= 42,547) of 47.6 years (P< .001), while South Asians (N= 3,459) have a younger mean age of 42.1 years (P< .001). The 30-day crude rate for cardiac complications among Chinese was 169/10,000 (p = 0.069), while for South Asians, it was 64/10,000 (p = 0.008) and, for the general population, it was 112/10,000. For neurological complications, the 30-day crude rate for Chinese was 160/10,000 (p < 0.001); South Asians was 40/10,000 (p = 0.526), and general population was 48/10,000. The 30-day all-cause mortality rate was significantly higher for Chinese at 8.1% vs 5.0% for the general population (p < 0.001), while it was lower in South Asians at 2.1% (p < 0.001).

# Conclusions

Chinese Canadians with COVID-19 in Ontario were much older and have higher cardiac and neurological complication rates and overall mortality rates compared to the general population. These data have significant implications for proper prevention and appropriate management for these vulnerable Chinese Canadians.

**Content Categories**

Epidemiology, patient care

**Key words**

Epidemiology, COVID-19, Cardiac and Neurological complications, Chinese Canadians, South Asian Canadians