



CanCOVID Speaker Series

Event Summary



The Impact of Sex and Gender on COVID-19

Speakers

Colleen Norris, PhD, MSc, BScN, RN, GNP, FAHA, FCAHS and Louise Pilote, MD, MPH, PhD

Objective

To offer an overview of the Speaker Series presentation on 'The Impact of Sex and Gender on COVID-19,' which provided the results of an investigation into sex and gender factors and COVID-19 infection rates and outcomes. The aim was to establish a framework to identify the gender factors that may result in differing outcomes after infection with COVID-19, and factors that require further investigation.

Key Messages

- Differences in immunological responses are influenced by both sex and gender, with SEX contributing to physiological and anatomical differences that influence exposure, recognition, clearance, and even transmission of microorganisms, and GENDER reflecting behaviours that influence exposure to microorganisms, access to healthcare or health-seeking behaviours that affect the course of infection.
- Hospitalization and mortality rates are higher in men than in women across all age groups, despite similar rates of infection by SARS-CoV-2. However, many countries are not reporting sex disaggregated data, including some Canadian provinces. Drs. Norris and Pilote found institutionalized gender inequality (as measured by the Gender Inequality Index) was positively associated with the male:female ratio of reported cases of COVID-19. Institutionalized gender and culturally entrenched roles and norms may influence who is most at risk of acquiring infection or who is able to receive a test.
- Though most risk factors for COVID-19 infection are biological for males, for females gendered factors play a more significant role and lower income earners, nightshift workers, and those living in high density households should be given higher priority. Furthermore, other factors also intersect with sex and gender and shape the impact of infection, including race and ethnicity.

Implications/Next Steps

- Vaccination prioritization strategies that focus on sex and gender specific risk factors will help reduce disease morbidity and mortality.

[Click here to view the recording of this event.](#)