

COVID-19 vaccination rates and related outcomes in adults with intellectual and developmental disabilities (IDD): An application of linked administrative health data to support Ontario's COVID-19 response.

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Objectives

Equitable vaccine distribution was essential in supporting Ontario's COVID-19 response, particularly for persons with intellectual and developmental disabilities (IDD), who have been disproportionately impacted by the pandemic. An Applied Health Research Question (AHRQ) request through ICES, sought to report on COVID-19 vaccination uptake in adults with and without IDD.

Approach

To examine the proportion of adults with IDD vaccinated for COVID-19, a request from the Ministry of Children, Community and Social Services (MCCSS) was approved by the ICES-AHRQ team. A secondary goal was to explore if vaccinated individuals with IDD experienced similar levels of protection from COVID-19 infection, to the general population. The open cohort was derived by linking vaccination events reported in Ontario COVID-19 Vaccine Data, between December 2020 to December 2021, to several administrative health databases. An algorithm was used to define IDD by a series of inpatient hospitalizations, emergency department and/or physician visits, with IDD diagnostic codes.

Results

The proportion who received at least two doses was similar between both groups (82% (IDD); 83% (non-IDD)). However, despite emerging evidence suggesting that high-risk populations should receive a third dose, a lower proportion of people with IDD (25%), compared to the general population without IDD (30%), had done so. The IDD subpopulation is generally younger, and partially explained the third dose findings when examined by age. Withal, adults with IDD vaccinated with at least two doses were mostly male (62% vs 48%), 18-29 years of age (44% vs 17%), and from the lowest neighborhood income quintile (26% vs 18%), compared to the non-IDD population, respectively. Cumulatively, adults with IDD had comparable rates of confirmed breakthrough case infections following vaccination (17%), to those without IDD (19%).

Conclusion/Implications

Administrative health data and analytics through the ICES-AHRQ program were used in responding to COVID-19, and providing public health guidance, for those with IDD. To inform decision making and policy actions related to immediate vaccination strategies, MCCSS used such findings to target vaccination efforts in specific IDD subpopulations, across Ontario.

