

# A Description of the Overall Adverse Health Outcomes During COVID-19 in NL

## Objective

To determine the change in adverse health outcomes that occurred during COVID-19.

## Practice Points

1. The first case of COVID-19 was diagnosed in NL on 16 Mar 2020. Subsequently, elective admissions to hospital were stopped for a period of time.
2. Other jurisdictions have observed a decrease in presentation to hospitals of patients with acute coronary syndromes and stroke.

## Data

This summary includes data reported in other summaries in Practice Points Volumes 7 and 8 on reduction during COVID-19 in the province for bed use, surgeries, and admission to Long-Term Care Facilities (LTCFs), together with change in incidence of STEMI, NSTEMI and unstable angina referred for coronary catheterization, and stroke.

Other events studied included severe peripheral vascular disease referred to the vascular laboratory at St. Clare’s Mercy hospital and patients referred for urgent colonoscopy in Eastern Health. The number of deaths for the province were obtained from the NL Centre for Health Information (NLCHI) for the months of Jan 2019 – Nov 2021. The duration of follow-up during COVID-19 differed for each event, described by weeks from the start of the pandemic.

## Results

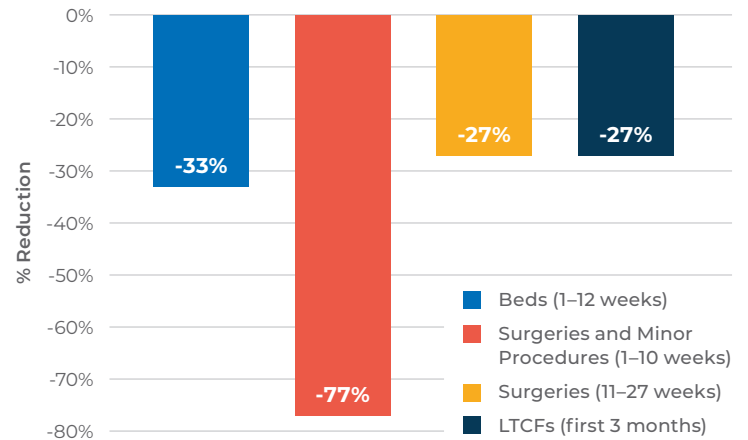


Figure 1. Per Cent Reduction in Acute Care Beds, Surgeries and Admissions to LTCFs During COVID-19 in NL

- Access to hospital, particularly for surgery, and to LTCFs was diminished during COVID-19.

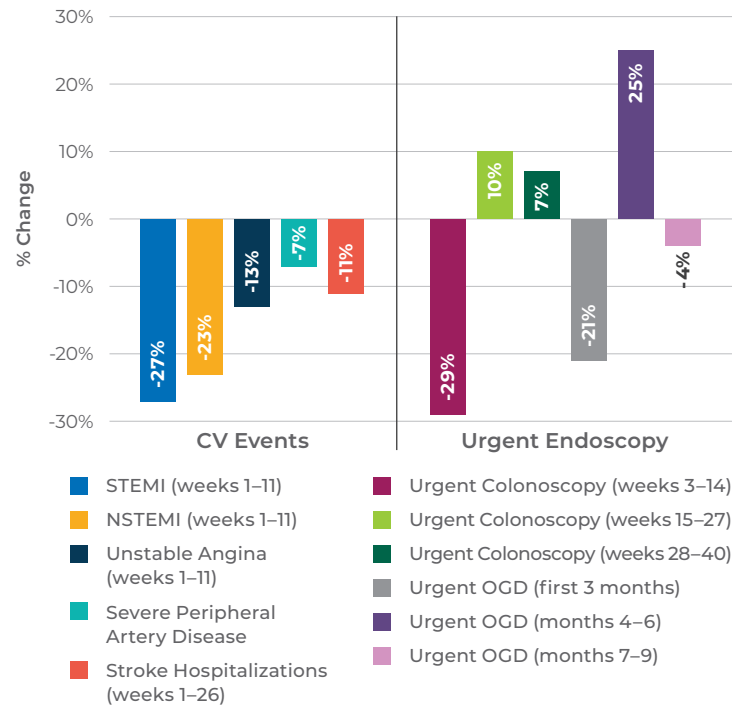
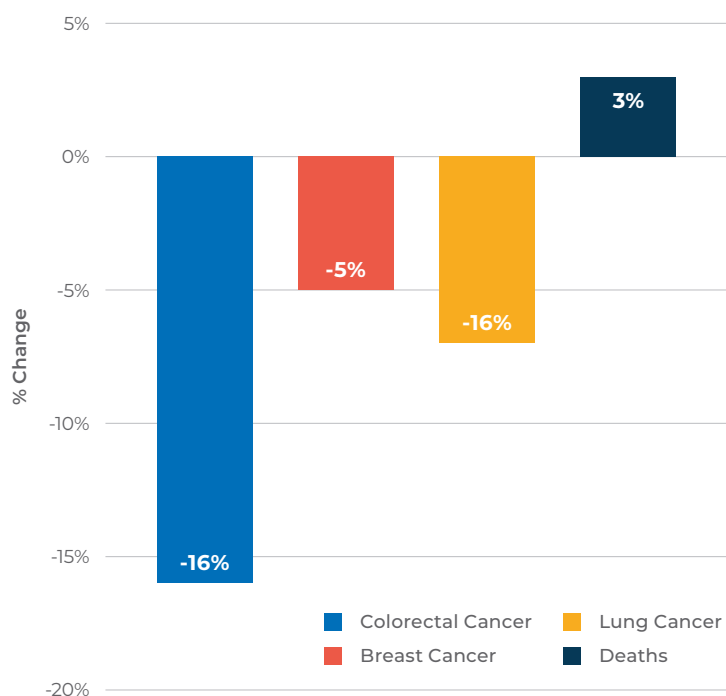


Figure 2. Per Cent Change in Cardio-Vascular Events and Urgent Endoscopy During COVID-19 in NL

- During the first three months of COVID-19, there were reductions in cardiac catheterizations for acute coronary syndromes and urgent colonoscopies, and smaller reductions in patients hospitalized for stroke.



**Figure 3. Per Cent Change in Invasive Cancers and Deaths During COVID-19 in NL**

- During the initial nine months of COVID-19, there was a 16% reduction in colorectal cancer, a 6.8% in lung cancer, and a 5% reduction in breast cancer.
- There was a small per cent increase in deaths (2.7%), comparing deaths from Apr–Nov 2020 during COVID-19 to those in the comparable period of 2019. This amounted to 80 deaths.

## Conclusions

1. There was a decrease in access to hospitals, particularly surgery, and a decrease in cardiovascular events presenting to hospital for cardiac catheterization, and in urgent endoscopy (both colonoscopy and oesophago-gastro-duodenoscopy) during COVID-19.
2. There was a decrease in diagnosis of invasive cancers that may manifest itself in later years as an increase in cancers at a later phase of invasiveness.
3. The numerical increase in deaths, while proportionately small, is a concern. It is possible that in future years cancer deaths could increase because of large reductions in surgery, CT scanning and screening programs during COVID-19.