

COVID-19: Creating a physical distance to reaching cancer screening and early detection goals

Dr. Darren Brenner and Dr. Robert Hilsden

COVID-19 is dramatically impacting daily life and health decisions among Canadians. While peripheral to most COVID discussions, this impact includes cancer screening and prevention. Population-based cancer screening programs are the most important secondary prevention interventions to reduce cancer morbidity and mortality in Canada. Organized screening programs such as mammograms for breast cancers and colonoscopies for colorectal cancer have demonstrated their cost-effectiveness at the provincial level in Canada.

With the cessation of all elective medical procedures in all provinces, Albertans and Canadians are not presently being routinely screened for breast and colorectal cancer as part of population-based screening. As we move from the second and into the third month of not screening, assessing the impact of this service interruption on future cancer diagnosis and outcomes among Canadians is essential to planning the return-to-service and priority triage for these programs.

To investigate the potential impact of medium to long-term interruptions on cancer screening, we are working with the Canadian Partnership Against Cancer Modelling team to examine how the current interruption (3 months) and potential longer interruptions (6, 9, 12 months) will impact breast and colorectal cancer outcomes over the next few years.

Our preliminary results (detailed results to follow) suggest that as expected in Canada we will likely observe a shift in stage at diagnosis for a large number of breast and colorectal cancers even from the 2-3 month interruption to date. The time to screen will also be increased due to the build-up of demand on a screening system previously operating at close to capacity.

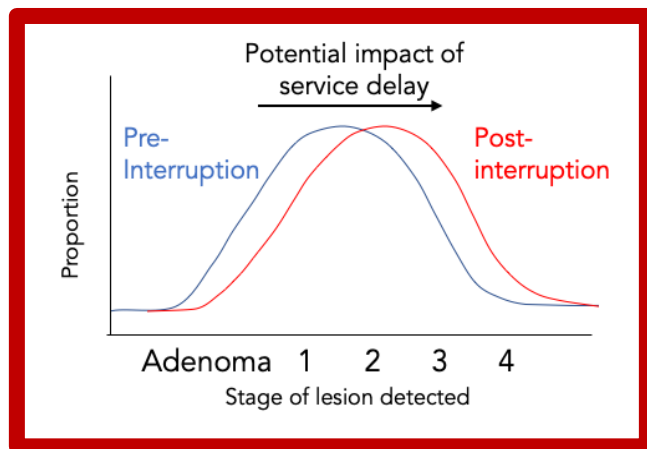


Dr. Darren Brenner,
Associate Professor,
Department of Oncology



Dr. Robert Hilsden,
Professor, Departments of
Medicine and Community
Health Sciences

The longer the interruption to service the more dramatic the impact on the shift in detection (shown for illustrative purposes below). As an example, a 9-month service disruption could lead to 28,000 advanced adenomas and cancers that would be detected at a later stage over the next decade. For breast cancer screening, a 6-12 month interruption in mammography would result in hundreds of breast cancer-related deaths in the coming decade.



So what do we know?

- The interruption to date (3 months from initiation until care is restored) will already have a notable impact on breast and colorectal cancer detection through delayed diagnosis.
- Additional planning will be required by provinces to determine how best to alleviate the back-log of testing from the service interruption.
- Any future shut-downs related to COVID-19 or other extraneous circumstances should weigh the impact of complete screening cessation in terms of future cancer impact.

While the COVID-19 situation represents a serious health concern to all Canadians, the downstream impacts of the shut-down will be felt for years to come in terms of cancer prevention efforts. We hope that these models will help in prioritizing groups for the return to screening service and inform discussions around the impact of potential future shut-downs.