

## NCCP guidance for Medical Professionals for testing COVID-19 in asymptomatic patients undergoing elective cancer surgery in response to the current novel coronavirus pandemic

**This document relates to patients who do not have COVID-19 or are not suspected of having COVID-19.**

**Current events surrounding the COVID-19 pandemic are challenging and all public health bodies are placing the safety of patients, staff and communities first in all decisions.**

**This is an evolving situation. This advice is based on current information, it is additional to the advice of the NPHET, the HSE and the DoH, and will be updated as necessary.**

**The NCCP acknowledges that each hospital is working under individual constraints, including staff and infrastructure, and as a result will implement this advice based on their own unique circumstances.**

**The purpose of this advice is to maximise the safety of patients and make the best use of HSE resources, while protecting staff from infection. It will also enable services to match the capacity for cancer care to patient needs if services become limited due to the COVID-19 pandemic.**

**Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment.**

**COVID-19 vaccination is now available and is being rolled out to priority groups as agreed nationally. More information on the vaccine and its roll-out is available online from the HSE here: <https://www2.hse.ie/screening-and-vaccinations/covid-19-vaccine/getting-covid-19-vaccine.html>**

**Information for cancer healthcare professionals on [vaccinations for adult patients with cancer](#) is available on the NCCP website at: <https://www.hse.ie/eng/services/list/5/cancer/profinfo/covid-19.html>.**

**Receipt of the vaccine (in either healthcare workers or their patients) does not eliminate the need to use appropriate PPE and to adhere to public health advice in relation to COVID-19.**

### 1 NPHET, HSE and DoH advice

Hospitals will operate under the overarching advice of the National Public Health Emergency Team (NPHET), the HSE and the DoH. Information is available at:

- HSE HPSC - <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/>
- HSE Coronavirus (COVID-19) - <https://www2.hse.ie/conditions/coronavirus/coronavirus.html>
- DoH Coronavirus (COVID-19) - <https://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/>

The NCCP has defined a number of principles to underpin the delivery of cancer care, where this needs to be delivered outside of cancer centres or the usual designated place of care. These are outlined on the NCCP website at:

<https://www.hse.ie/eng/services/list/5/cancer/profinfo/covid-19.html>

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## 2 Purpose

The purpose of this guidance document is to provide guidance for testing COVID-19 in asymptomatic patients undergoing elective cancer surgery in response to the current novel coronavirus.

## 3 Clinical question

For patients undergoing elective cancer surgery who are COVID-19 asymptomatic, what is the best test or combination of tests to rule out COVID-19 infection?

## 4 Quality of the evidence

There have been case reports on the increased ICU admissions and mortality post surgery in patients who were subsequently suspected of having asymptomatic COVID-19 perioperatively (Lei et al. 2020). As cancer patients undergoing surgery are a particularly vulnerable group it is important to reduce the risk of surgery being performed on a patient with asymptomatic COVID-19 infection.

There is no test or tests that can rule out COVID-19 infection in asymptomatic patients. There will be false negatives with both RT-PCR and CT scans.

### *RT-PCR*

There is no direct evidence to answer this question so it has been extrapolated from indirect evidence from a meta-analysis on testing of symptomatic patients (Kim et al. 2020). There is a high level of heterogeneity reported in this study and all results should be interpreted with caution.

The pooled sensitivity for RT-PCR was 89% (95% CI: 81%, 94%). This reported sensitivity of RT-PCR for COVID-19 is in symptomatic patients and a lower sensitivity would be expected in the asymptomatic population. The prevalence of COVID-19 in the study populations may also be different in the community in Ireland and therefore the PPV may also be lower. The meta-analysis concluded that in regions with low disease prevalence, the PPV of RT-PCR was more than 10 times higher than that of a CT scan (Kim et al. 2020).

### *CT*

A systematic review (Shao et al. 2020), two retrospective studies (Shah et al. 2020, Chetan et al. 2020) and a prospective audit (Callaway et al. 2020) specifically address CT screening for COVID-19 in asymptomatic patients prior to surgery. Results from a COVID-19 low prevalence population demonstrate that preoperative chest CT provides little additional value for the detection of COVID-19 in asymptomatic individuals when performed in conjunction with a screening questionnaire and RT-PCR (Shah et al. 2020). Similar results were found in preoperative asymptomatic UK populations (Chetan et al. 2020, Callaway et al. 2020). A sensitivity of 68.42% for CT has been reported in asymptomatic patients undergoing any surgery (Callaway et al. 2020). Evidence suggests that there is less utility for CT scan in asymptomatic patients than in symptomatic patients (Shao et al. 2020).

RT-PCR is currently the best test to diagnose COVID-19 infection. The evidence does not support the routine use of CT screening scans for COVID-19 infection for elective cancer surgery patients.

If COVID-19 is not detected on RT-PCR this does not rule out COVID-19 infection. There is an asymptomatic phase of infection with COVID-19 and some patients will remain asymptomatic throughout their infection. Therefore, it is important to communicate the risks of surgery with asymptomatic COVID-19 infection and inform the patient that the best way to minimise their risk of COVID-19 infection is to cocoon at home prior to elective cancer surgery and follow public health advice including hand hygiene, social distancing and the use of masks.

## 5 Benefit and Harm

There have been case reports on the increased ICU admissions and mortality post surgery in patients who were subsequently suspected of having asymptomatic COVID-19 perioperatively (Lei et al. 2020). The risk to the patient appears higher in those undergoing more complex or more lengthy surgeries, or otherwise vulnerable due to age and comorbidities (Lei et al. 2020).

The risk to a patient of undergoing surgery with asymptomatic COVID-19 infection should be balanced against the risk of delaying cancer surgery. People undergoing cancer surgery are a vulnerable group, therefore all patients should have an RT-PCR test.

Healthcare professionals should still follow recommendations regarding appropriate PPE, noting that the RT-PCR COVID-19 test does not rule out COVID-19 infection.

## 6 Justification for change

The purpose of this advice is to maximise the safety of patients and make the best use of HSE resources, while protecting staff from infection.

## 7 Equity, acceptability, preferences and values

The recommendations attempt to reduce uncertainty for patients and medical professionals while minimising potential harm to patients and healthcare staff. The Guidance Development Group agreed that the request to cocoon was proportionate when compared to the potential harm of undergoing elective surgery with asymptomatic COVID-19 infection.

## 8 Resources

These recommendations are designed to provide the most effective use of resources and to reduce the impact on ICU. This is dependent on RT-PCR COVID-19 testing availability.

Irish datasets on presurgical test findings would add to the evidence base on this topic.

## 9 Recommendations

- Patients should be advised the best way to minimise their risk of COVID-19 exposure is to cocoon for two weeks prior to surgery in line with public health advice.  
Quality of Evidence: High  
Grade of recommendation: Strong
- Patients should have an RT-PCR COVID-19 test within three days prior to scheduled cancer surgery.  
Quality of Evidence: Moderate  
Grade of recommendation: Strong
- If the RT-PCR test shows virus is detected, elective cancer surgery should be deferred in line with national recommendations.  
Quality of Evidence: Moderate  
Grade of recommendation: Strong
- The routine use of pre-operative chest CT to screen for COVID-19 in elective cancer surgery patients is not recommended.  
Quality of Evidence: Moderate  
Grade of recommendation: Strong

## 10 Good practice points

- No test can rule out a COVID-19 infection, therefore patients should be given advice preoperatively on how to minimise infection as part of the consent process.
- The time to surgery versus the cocooning period prior to surgery should be determined based on an assessment of the benefit versus the harm of delay to surgery.
- Information on hand hygiene, respiratory etiquette and social distancing should be given to household contacts to minimise risk of COVID-19 infection.
- Shared decision making should take place to ensure that the benefit and risks of surgery with potential COVID-19 infection have been communicated to the patient.
- The number of visits to the hospital should be minimised.

## 11 Practical issues

Postoperative surveillance/ protocols should be in place to prevent and identify any postoperative infection.

The patient should be given written information regarding cocooning and strategies to minimise their risk of COVID-19 infection. (Patient information should inform the patient that any test cannot rule out COVID-19 infection).

## 12 GRADE

The grade of recommendations (Guyatt et al. 2008) considered the following items:

1. Quality of evidence,
2. Benefit and harm,
3. Equity, acceptability, preferences and values,
4. Resources

## 13 Guidance development group

Dr Eve O'Toole, Guideline Lead, NCCP

Dr Helena Gibbons, Senior Research Officer, NCCP

Dr Niamh Kilgallen, Senior Research Officer, NCCP

Ms Louise Murphy, Research Officer, NCCP

Dr Triona McCarthy, Consultant Public Health, NCCP

Prof. John Reynolds, Professor of Surgery, Trinity College Dublin and St James Hospital

Prof. Deborah McNamara, Co-Lead National Clinical Programme in Surgery, RCSI

Prof. Arnold Hill, Consultant Surgeon, Beaumont Hospital (Chair)

Dr Ruth Dunne, Consultant Radiologist, Beaumont Hospital

Dr Anne Carroll, Fellow in Paediatric Radiology, Temple Street Hospital (until Sept 2020)

Dr Peter MacMahon, Consultant Radiologist, Mater Misericordiae University Hospital (from Sept 2020)

Dr Mary Keogan, Clinical Lead, National Clinical Programme for Pathology

Prof. Leah McClimans, Associate Professor, Philosophy

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