



**Coronavirus (COVID-19): guidance
on treating patients**

Guidance from the Chief Medical
Officer (CMO)

COVID-19 position statement:

Management of patients attending an endoscopy unit for any endoscopic procedure not requiring general anaesthesia (bronchoscopy, cystoscopy, upper gastrointestinal and lower gastrointestinal endoscopy)

Summary of revisions

Date	Version	Revisions
25/01/2021	1	First version published
29/01/2021	1.1	Clarification of pathway for patients receiving emergency procedures in the absence of a SARS-CoV-2 test result (section 1.2) and correction of infection control and physical distancing information for patients on the low-risk pathway (section 2.1) Clarification of discharge arrangements for individuals attending as outpatients (section 2.2)

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Introduction

The purpose of this guideline is to provide NHSScotland with advice on the management of patients attending an endoscopy unit for any endoscopic procedure not requiring general anaesthesia in the context of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) viral pandemic.

This guideline is for:

- health and care practitioners
- health and care staff involved in planning and delivering services
- national procurement teams.

The recommendations are based on:

- guidance developed by the British Society of Gastroenterology committee on [further recovery of endoscopy services during the post-pandemic phase of COVID-19](#), and
- expert opinion of endoscopy leads in NHSScotland.

This guidance will be reviewed and updated as new evidence emerges.

1. Preprocedure

1.1 Patients attending for scheduled elective procedures

To fully utilise available endoscopy capacity, patients attending for scheduled elective procedures should:

- be assessed for fitness and willingness to attend prior to scheduling. This should be performed by the team carrying out the endoscopic procedure
- have a combined oropharyngeal and nasal swab test for SARS-CoV-2 by polymerase chain reaction (PCR) testing up to three days prior to the procedure
- be asked to self isolate after their swab, until their planned procedure
- be made aware that they should not attend if they have symptoms consistent with COVID-19 and should then follow the advice given on [NHS Inform](#).

Patients who test **negative** should:

- have clear directions to the endoscopy unit to minimise patient contact with the hospital environment
- be advised to attend at the allocated time
- be advised to attend on their own, where possible
- be aware that they are required to wear face masks on entering the hospital, where possible and should adhere to the hand hygiene and social distancing guidance
- on arrival, have a further symptom assessment, cancelling the procedure if showing any COVID-19 symptoms or have had close contact with a person that has tested positive or shown COVID-19 symptoms.

Patients who test negative will proceed on the **low-risk (green) pathway**.

Patients who test positive, develop symptoms or have had close contact with a person that has tested positive or shown COVID-19 symptoms should:

- have their procedure cancelled other than in exceptional circumstances. The procedure should be rescheduled following the appropriate isolation period, and following further symptom assessment and testing.

Patients who do **not** have a SARS-CoV-2 test result available should have their procedure cancelled other than in exceptional circumstances. If a procedure is required in these circumstances, where patients do not have COVID-19 symptoms and have not had close contact with a person who has tested positive or shown COVID-19 symptoms, they should proceed on the **medium-risk (amber) pathway**.

1.2 Patients attending for emergency procedures

Patients attending for emergency procedures should, where possible, have the result of a combined oropharyngeal and nasal swab test for SARS-CoV-2 prior to the procedure.

- If the test result is **positive** the endoscopy should only proceed in exceptional circumstances via the **high-risk (red) pathway**.
- If the swab result is **negative**, the procedure will proceed on the **medium-risk (amber) pathway**, which for the purposes of endoscopy is the same as the high-risk pathway.
- If a SARS-CoV-2 test result is **not available** before the procedure, where patients do not have COVID-19 symptoms and have not had close contact with a person who has tested positive or shown COVID-19 symptoms, they should proceed on the **medium-risk (amber) pathway**. Otherwise, they should proceed on the **high-risk (red) pathway**.
- Patients requiring transfer from a ward should be escorted by a staff member, wearing appropriate PPE as detailed in the [Scottish COVID-19 IPC addendum for acute settings](#). All patients should wear a mask, where possible, during transfer.

2. Departmental procedures

The 4-nation [COVID-19: infection prevention and control \(IPC\) guidance](#) applies to endoscopy. The [Scottish COVID-19 IPC addendum for acute settings](#) aligns COVID-19 guidance with the National Infection Prevention and Control Manual (NIPCM: www.nipcm.hps.scot.nhs.uk) and details operational differences in Scotland. This should be read in conjunction with the [HPS rapid review](#) assessing the infection prevention and control measures for the prevention and management of COVID-19 in health and care settings in Scotland.

- Staff and care workers should maintain a distance of two metres, where possible, unless providing clinical care and wearing appropriate PPE. Outside of direct clinical care staff should ensure they adhere to the [Scottish Government guidance on extended use of face masks](#).
- Patients should be cohorted throughout the pathway within their clinical risk group. This includes admission, recovery and discharge areas. Where possible, low-risk procedures should be scheduled prior to any medium-risk or high-risk procedures.

2.1 Low-risk pathway procedures

The **low-risk pathway** is appropriate for patients who have been triaged and meet the following criteria:

- asymptomatic, and
- no known contact with a COVID-19 case, and
- isolation and testing criteria as described in the SIGN/ CMO Clinical Cell guidance [on reducing the risk of postoperative mortality due to COVID-19 in patients undergoing elective surgery](#).

Infection control (including PPE)

Details of PPE requirements are set out in the [Scottish COVID-19 IPC addendum for acute settings](#).

Airborne precautions for aerosol generating procedures (AGPs) such as upper endoscopy and bronchoscopy are not required for patients in the low-risk pathway. Further details are found in the [Scottish IPC COVID-19 addendum for acute settings](#).

At conclusion of the endoscopy the patient should be asked to don a new face mask if removed during the procedure.

Physical distancing

Physical distancing must be maintained throughout endoscopy units wherever possible. However, where there is limited space in recovery areas, this may be reduced in the recovery area only for the low risk pathway where the following measures are in place:

- patients are wearing face masks
- hand-hygiene facilities are available and actively encouraged amongst patients
- patient (and accompanying carer) movement within the endoscopy department is monitored and managed to limit patient interaction
- signage alerts patients to the importance of compliance with these measures.

Safe management of environment/equipment and body/blood products

During the pandemic the frequency of cleaning should be at least twice daily. General purpose detergents may be used in the low-risk pathway.

There is no requirement for additional endoscopy room cleaning or fallow time based on air exchanges in between patients on the low-risk pathway.

AGPs

There is no additional requirement for postprocedure downtime or ventilation on the low-risk pathway.

Discharge

There are no restrictions on patient discharge. Patients should be provided with clear directions to the hospital exit to minimise patient contact in the hospital environment.

2.2 High-risk and medium-risk pathway procedures

The high-risk and medium-risk pathways are defined as follows in the [Scottish IPC COVID-19 addendum for acute settings](#).

High-risk COVID-19 pathway

The **high-risk COVID-19 pathway** (in the [UK IPC remobilisation guidance](#)) is more commonly known as the **red pathway** in many health boards within Scotland. The following should be managed within the high-risk pathway:

- individuals with confirmed COVID-19
- individuals with symptomatic or suspected COVID-19 (as determined by hospital or community case definition or clinical assessment where there is a suspicion of COVID-19, taking into account atypical and non-specific presentations in older people with frailty, those with pre-existing conditions and patients who are immunocompromised)

- those who are known to have had contact with an individual with confirmed COVID-19 and are still within the 14 day self-isolation period and those who have been tested and results are still awaited
- see footnote.¹

Medium-risk COVID-19 pathway

The **medium-risk COVID-19 pathway** (in the [UK IPC remobilisation guidance](#)) is more commonly known as the **amber pathway** in many health boards within Scotland. The following should be managed within the medium-risk pathway:

- all other patients who have been triaged and who do not meet the criteria for the low-risk or high-risk pathways above and who do not have any symptoms of COVID-19
- asymptomatic individuals who refuse testing or for whom testing cannot be undertaken for any reason
- see footnote¹
- recovered COVID-19 patients – see [Scottish IPC COVID-19 addendum for acute settings](#).

The guidance for patient placement, PPE, equipment, care of the environment, body fluids and blood, and AGPs are the same for the medium-risk and high-risk pathways for the purposes of endoscopy.

Patient placement

- Physical barriers or privacy curtains should be used to minimise opportunities for close contact, where possible.
- Physical distancing should be two metres.
- Patients are required to wear a face mask, where possible.

1 When deciding patient placement for untriaged individuals where symptoms are unknown – for example, where the patient is unconscious – or individuals who have returned from a country on the quarantine list in the last 14 days, a full clinical and individual assessment of the patient should be carried out prior to placement in a side room on the red or amber pathway. This assessment should take account of risk to the patient (immunosuppression, frailty) and clinical care needs (treatment required in specialist unit).

PPE

Table 1: PPE for direct patient care determined by pathway

PPE used	Low-risk pathway (green)	Medium-risk pathway (amber)	High-risk pathway (red)
Gloves	If contact with blood and body fluid (BBF) anticipated then single use.	If contact with BBF is anticipated then single use.	Worn for all direct patient care. Single use.
Apron or gown	If direct contact with patient, their environment or BBF is anticipated (gown if extensive splashing anticipated) then single use.	If direct contact with patient, their environment or BBF is anticipated (gown if extensive splashing anticipated) then single use.	Always within 2 metres of a patient (gown if extensive splashing anticipated). Single use.
Face mask	Always within 2 metres of a patient - Type IIR fluid-resistant surgical face mask (FRSM).	Always within 2 metres of a patient - Type IIR FRSM.	Always within 2 metres of a patient - Type IIR FRSM.
Eye and face protection	If splashing or spraying with BBF anticipated. Single use or reusable.	If splashing or spraying with BBF anticipated. Single use or reusable.	Always within 2 metres of a patient. Single use, sessional or reusable following decontamination.

Table 2: PPE for aerosol-generating procedures, determined by pathway

PPE used	Low-risk pathway (green) ²	Medium-risk pathway (amber)	High-risk pathway (red)
Gloves	Single use	Single use	Single use
Apron or gown	Single-use apron Gown if splashing or spraying anticipated	Single-use gown	Single-use gown
Face mask or respirator	Type IIR FRSM ³	Filtering facepiece 3 (FFP3) mask or powered respirator hood ³	FFP3 mask or powered respirator hood ³
Eye and face protection	Single use or reusable	Single use or reusable	Single use or reusable

Full body gowns or fluid-repellent coveralls must be:

- worn when there is a risk of extensive splashing of blood and/or body fluids
- worn when undertaking AGPs
- worn when a disposable apron provides inadequate cover for the procedure or task being performed
- changed between patients/individuals and immediately after completing a procedure or task unless sessional use is advised due to local/national data.

Safe management of environment/equipment and body/blood products

Equipment should be single use, where practicable.

All reusable non-invasive equipment must be decontaminated after every patient using a cleaning /disinfection product agreed by the local infection protection and control team following the procedures in [appendix 7 of the NIPCM](#).

Cleaning frequencies of the care environment must be increased to a minimum of twice daily (see the [Scottish IPC COVID-19 addendum for acute settings](#)).

Discharge

Discharge can occur when the individual is well enough and the clinician has provided them with advice to self isolate:

- for 14 days after discharge from an inpatient facility from the date of the positive SARS-CoV-2 PCR test (providing there is clinical improvement with at least some respiratory recovery and absence of fever (>37.8° C) for 48 hours without use of antipyretics), or
- for 10 days after discharge from an outpatient facility from the date of the positive SARS-CoV-2 PCR test (providing individuals feel better and no longer have a high temperature).

Consideration should be given for escorting outpatients from the endoscopy suite to the hospital exit to minimise contacts with the patient and hospital environment. Discharge to another care area may be dependent on the testing and/or isolation facilities available.

Discharge information for patients/individuals should explain their and their family members' or carers' need for any self isolation and/or quarantine. Ambulance services and the receiving facilities must be informed of the infectious status of the individual.

Inpatients should be escorted, wearing a face mask, to the ward by a staff member wearing the appropriate PPE.

2 The low-risk or green pathway can be used provided that the individual has no other known or suspected infectious agent transmitted via the droplet or airborne route.

3 FFP3 masks must be fluid resistant. Valved respirators may be shrouded or unshrouded. Respirators with unshrouded valves are not considered to be fluid resistant and therefore should be worn with a full face shield if blood or body fluid splashing is anticipated.

3. The endoscopy room

The appropriate post-AGP fallow time should be determined from the ventilation rate in the room and any additional mitigation. The fallow time should not be reduced to below 10 minutes regardless of ventilation, as this is the time taken for larger droplets to settle onto surfaces. Droplet settling removes 90% of the circulating aerosol. After three air exchanges the 10% of remaining aerosol will be reduced to 0.5%.

Following an AGP, the patient and staff may exit the endoscopy room. The ventilation air changes in theatre are high enough to allow the patient to safely exit the theatre provided that theatre doors are closed behind the patient again.

The endoscopy room should be terminally cleaned after each patient. Cleaning may commence after 10 minutes during which time droplets will have settled. However, respiratory PPE (FFP3) must be worn if the full fallow time has not expired. See [Scottish IPC COVID-19 addendum for acute settings](#) for more details.

Advice on donning and doffing PPE is set out in the [NIPCM, Appendix 6](#).

At conclusion of the endoscopy the patient should be asked to wear a face mask if this was removed during the procedure.

4. Methodology

This guidance has been produced on behalf of the Scottish Government's Chief Medical Officer in response to the COVID-19 pandemic situation and so has not followed the standard process used by SIGN to develop guidelines. The recommendations are based on guidance developed by the British Society of Gastroenterology committee on [further recovery of endoscopy services during the post-pandemic phase of COVID-19](#) which used a modified Delphi consensus process. Rapid expert peer review was conducted in Scotland as assurance.

4.1 Updating the guidance

This guidance will be considered for review if significant new evidence emerges.

4.2 Contributors

Michelle Thornton Colorectal surgeon, NHS Lanarkshire

4.3 Peer review

The document was reviewed by

- endoscopy leads from every NHS Scotland health board
- the National Endoscopy and Urology Diagnostic Elective Care Group (the national endoscopy oversight group)
- the National Cancer Recovery Group
- the COVID-19 Clinical Guidance Cell.

4.4 Editorial review

As a final quality check, the guideline was reviewed by an editorial group, as follows:

Professor Tom Evans Professor of Molecular Microbiology, Institute of Infection, Immunity & Inflammation, University of Glasgow and Consultant Infectious Disease Physician, NHS Greater Glasgow & Clyde

Dr Roberta James Programme Lead, SIGN

Dr Safia Qureshi Director of Evidence, Healthcare Improvement Scotland

Useful Resources

[British Society of Gastroenterology guidance on recommencing GI Endoscopy in the deceleration & early recovery phases of the COVID-19 pandemic](#)

[British Society of Gastroenterology multi-society guidance on further recovery of endoscopy services during the post-pandemic phase of COVID-19](#)

[British Society of Gastroenterology Advice regarding working in endoscopy for vulnerable clinical staff during the COVID-19 pandemic](#)