

## COVID-19 FAQs for sonographers

### Contents

Introduction .....	1
How do I protect staff and patients during ultrasound lists? .....	2
Should sonographers wear PPE?.....	2
Should patients with COVID-19 come to the ultrasound department? .....	3
How should I clean the ultrasound room? .....	3
How else can staff keep safe? .....	3
I have a specific health problem, what should I do? .....	4
Should we change the way we work in ultrasound?.....	4
What advice do I give to pregnant patients? .....	4
Who should attend pregnancy ultrasound scans?.....	5
Should we be reducing scans in pregnancy e.g. screening and growth scans? .....	5
Should we be cancelling non-urgent examinations?.....	7
Will we be covered if we ration services due to unprecedented challenges?.....	7
Other resources.....	8
Point of care ultrasound .....	8
Preparing for Covid-19.....	8
Appendix 1 (RCOG 2020): .....	9

### Introduction

In these challenging times the SCoR and BMUS realise that sonographers are having to deal with managing the demands of providing a high quality service whilst protecting staff and patients, possibly with limited staffing and concerned patients. This frequently asked questions document aims to help provide answers, where possible, or guide sonographers to relevant sources of current information. The information is changing on at least a daily basis, so it is important to review advice from [Public Health England](#) and other relevant bodies.

It is important to realise that the current information regarding COVID-19 is extremely fluid, changing as the situation demands. It is therefore important to follow the advice individual trusts and employers are releasing as this is pertinent to the local situation and will be in line with government advice.

The SCoR has general advice on the website [www.sor.org/covid19](http://www.sor.org/covid19). This includes information about protecting staff and patients in cases of suspected /infected patient contact and service resilience measures needed to ensure the continuity of service, wherever possible. The [Health and Care Professions Council](#) (HCPC) have resources on their

website, including the document [How we will continue to regulate in light of novel coronavirus \(COVID-19\)](#).

[NHS England and NHS Improvement](#) are co-ordinating information about COVID-19 for health care professionals.

## **How do I protect staff and patients during ultrasound lists?**

Advice should be sought from the infection control team about decontamination of ultrasound machines, transducers and scan rooms. Personal protective equipment should be worn when it is necessary to scan a patient with suspected or known COVID-19. See the [SCoR website](#) for more information.

The [International Society of Ultrasound in Obstetrics and Gynecology \(ISUOG\)](#) webinar and the article by [Kooraki et al](#) (2020) may also be helpful.

Keeping staff informed of decisions along with reasons for the action is important. Make sure staff are fully aware of current guidance on how to protect themselves, but also when to call in sick and self-isolate. Occupational health advice should be sought for staff who need additional support, due to the demands of working in such unprecedented times and having to making difficult decisions.

When planning workloads, it is important to ensure that waiting rooms are not overcrowded ([ISUOG safety statement 2020](#)) and seating should be spaced at least 2 meters apart. Limiting the number of visitors, staff and trainees in the room is also advised.

Patients and relatives can become anxious during these difficult times, particularly in pregnancy and when appointments are cancelled for patients with COVID-19 symptoms. It is important to have local policies in place to safeguard staff and protect them and other service users. See appendix 1 for suggested template for rescheduling appointments.

## **Should sonographers wear PPE?**

An [ISUOG safety statement \(2020\)](#) highlights that as sonographers are unable to maintain recommended distances from patients during an examination, they need to take all necessary precautions. It is suggested that as sonographers are in close contact with patients they should use contact precautions and droplet precautions. This includes the wearing of a surgical mask and gloves, ensuring good hand hygiene and cleaning the equipment.

Use a three-ply surgical mask when performing ultrasound scans as there is direct patient contact. The surgical masks may be reused during the care of multiple patients, if used to protect the healthcare provider from an activity with low transmission risk, such as ultrasonography. Replace the mask as soon as it is damp and do not reuse single-use masks.

Nitrile-free disposable gloves should be used during the ultrasound examination and changed after each patient.

The latest government advice in the document [Guidance for infection prevention and control in healthcare settings](#). Advice from NHSE & I is that any healthcare worker providing close patient contact within 1 metre of a patient/client who meets the case definition of COVID-19 should wear appropriate PPE this will be gloves, aprons, fluid repellent face masks and eye protection if risk of splashing from blood or body fluids.

More information and posters to describe the putting on and crucially the removal of PPE can be found in the [document](#), along with advice on washing uniforms and managing blood and body fluid spills.

## **Should patients with COVID-19 come to the ultrasound department?**

Advice from [ISUOG](#) is to try and delay ultrasound examinations, if possible, with someone who has known COVID-19 or symptoms. If it is essential that they are scanned, ideally have a dedicated room for such cases or for in-patients consider bedside scanning. If the patient has to be scanned in the main ultrasound department, it is advisable to book their appointment for the end of the working day, to allow for a deep clean of the room after their examination. Anything that has been in contact with the patient or within the sneezing/cough zone (at least 1 meter) should be cleaned, in addition to the sink and other areas that may be contaminated. [Public Health England](#) advice should be followed in relation to PPE and hands should be washed thoroughly after removal of PPE.

## **How should I clean the ultrasound room?**

COVID-19 is de-natured by common disinfection, so good hand hygiene and cleaning of equipment and all surfaces with which patients or droplets might have come into contact is central to reducing the spread of the virus. Equipment should include anything that might have become contaminated by contact or droplets such as the ultrasound machine, gel bottle, probes, couch, keyboard, door handles, sink.

There is guidance on general cleaning and decontamination of ultrasound machines from [AXREM](#), BMUS and SCoR (2020). [ISUOG](#) (2020) have released a safety statement on the safe performance of obstetric and gynecological scans and equipment cleaning in the context of COVID-19. It is important to remember that for effective disinfection surfaces, transducers and other equipment must be cleaned before disinfecting. Ultrasound manufacturers' guidance must be reviewed when selecting the appropriate cleaning and decontamination methods for ultrasound machines and transducers, to avoid damage and impacting on warranties ([AXREM, BMUS and SCoR 2020](#)).

Consideration of UK regulations and local infection control advice is required when reviewing international guidance on the use of products for decontamination.

[The ISUOG safety statement](#) recommends limiting the number of transducers connected to the machine and storing accessories in a cupboard to reduce the risk of contamination.

## **How else can staff keep safe?**

Staff should try to ensure social distancing when possible, if not scanning, in line with the latest Public Health England advice. This is important when taking breaks during the working day. Try to avoid close contact with colleagues in the workplace, unless absolutely necessary. Conversations should be at a safe distance. Remember that your colleagues could potentially be infected, so follow the government advice. It is not advisable to eat together, as this can cause staff to drop their guard and potentially infect each other.

During this difficult time, it is however important to ensure good support for all staff. Team working and good communication will be essential, in addition to ensuring adequate rest

breaks are provided and staff have facilities to take appropriate periods of rest. Access to occupational health or counselling support should be provided by employers.

It is important to limit the number of people in the ultrasound room, to reduce the spread of the virus.

## **I have a specific health problem, what should I do?**

[ISUOG safety statement](#) recommends that ultrasound providers with specific health problems that place them at greater risk (as detailed by local occupational health guidelines) should be excluded from performing ultrasound examinations.

The [RCOG](#) provide guidance for pregnant staff during the pandemic.

## **Should we change the way we work in ultrasound?**

[ISUOG](#) advise the following, in their safety statement:

- Use of single-use gel packs is recommended as opposed to gel containers.
- Consider transducer cover for non-endoluminal probes (this is not a CDC absolute requirement).
- Attempt to shorten the duration of the examination by arranging for the most experienced sonologist/sonographer to perform the examination.
- Inform the patient that a detailed explanation will not be given during the examination.

## **What advice do I give to pregnant patients?**

The RCOG [Coronavirus \(COVID-19\) Infection in Pregnancy](#) guidance suggests that women who should be attending for routine antenatal care, including growth scans, should delay their appointment until they have completed the recommended period of self-isolation, with suspected or confirmed COVID-19. Urgent appointments will require a senior decision on urgency and potential risks/benefits.

Anyone with suspected or confirmed COVID-19 requiring an urgent scan should ideally be booked to attend at the end of the day.

Urgent, unplanned appointments for those with suspected or confirmed COVID-19 should ideally be triaged over the phone. Local protocols are required to ensure women with confirmed or suspected COVID-19 are isolated on arrival to EPU or triage units and full PPE measures are in place for staff.

Medical, midwifery or obstetric care should otherwise be provided as per routine.

Patient advice is available from the [RCOG website](#) as FAQ.

The International Society of Ultrasound in Obstetrics and Gynecology (ISUOG) have published [interim guidance](#) and a document [Coronavirus in pregnancy and delivery: rapid review](#), which may be useful.

The [RCOG](#) recommend assessing patients to determine if they or their partner have symptoms suggestive of COVID-19 or meet the stay at home guidance before they enter

the department. If they do, they are given written information about why their appointment is to be postponed and contact details are taken, to arrange a rescan after a period of self-isolation (see appendix 1 for template).

## **Who should attend pregnancy ultrasound scans?**

During these difficult times it would be useful to agree a local policy to reduce the number of people in the ultrasound room. The [RCOG guidance](#) recommends that patients should be asked to attend alone if possible or with a maximum of one partner/visitor+.

If the patient is required by a trust to attend alone for their antenatal scan, [SCoR & BMUS](#) do not advocate the use of virtual attendance by partners with on-line video calls such as Face Time or the filming of the examination due to the potential to distract the sonographer during the scan and confidentiality issues.

Some centres and private clinics offer ultrasound examinations for bonding and reassurance. These clinics may become increasingly busy, if the NHS has to reduce the number of examinations it can offer during the pandemic. Government and RCOG advice should be followed in all ultrasound settings, to ensure staff and patient safety. Limiting the number of people in the ultrasound room and the provision guidance on managing patients with symptoms or a diagnosis of COVID-19 is essential.

## **Should we be reducing scans in pregnancy e.g. screening and growth scans?**

During an ISUOG webinar on 17.3.2020 the SCoR asked about this and the implications of reducing routine screening examinations and growth scans in pregnancy, particularly when staffing levels are impacted by the virus. Currently routine examinations are continuing for those with no symptoms of COVID-19, however these will be reviewed if staffing levels reduce. Team working with early pregnancy, fetal medicine and sonography departments will be essential to ensuring service provision can be maintained as much as possible.

In England all advice on the operational delivery of screening programmes during the COVID-19 response will come from [NHS England and NHS Improvement](#). This will ensure co-ordination and consistency with the advice being given to NHS symptomatic services. It is likely that this will be similar for the devolved countries.

If policy is changed to accommodate staff shortages during this period of uncertainty it would be prudent to document protocols and get sign off from, the Trust board. Any changes to protocols should be clearly documented with a name/date and kept for future reference with other previous protocols.

### **24.3.2020 The RCOG have produced [guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus \(COVID-19\) pandemic](#).**

The key points include:

- “These screening programmes are time critical and **we should continue to offer timely screening**”.

- “If staffing levels start to impact on such time critical services, the local screening team should **inform their senior management team and commissioners to discuss contingency and mitigation planning.**”
- “All women should be **asked to attend alone if possible** or with a maximum of one partner/visitor”
- “All women should **be initially screened before entering the department** to see if they have [symptoms that are suggestive of COVID-19, or if they meet current ‘stay at home’ guidance.](#) If a woman currently meets ‘stay at home’ guidance the appointment should be rebooked after the isolation period ends”
- Guidance on delaying appointments for patients with symptoms of COVID-19 is given within the [document](#) and a suggested template provided (see appendix 1)
- “The woman should be informed that if she remains symptomatic or develops symptoms she must not attend her appointment, instead she should phone her maternity service for advice”.
- If a patient wants screening and is too late for the combined test,
  - between 14<sup>+2</sup> to 17<sup>+6</sup> weeks a dating scan should be performed and a quadruple test offered for trisomy 21. Head circumference (HC) used for the quadruple test.
  - between 18<sup>+0</sup> to 20<sup>+0</sup> weeks an anomaly scan should be performed and a quadruple test offered for trisomy 21. HC used for the quadruple test.
  - Between 20<sup>+1</sup> to 23<sup>+0</sup> weeks an anomaly scan can be performed.
- If there are capacity issues due to the pandemic and it is not possible to continue providing the screening service there should be discussions with senior staff. “If the service can only provide a single scan, it is recommended that this is performed at 18<sup>+0</sup> to 20<sup>+0</sup> weeks, with the option of the quadruple test for women who wish to be screened for trisomy 21”.
- Daily discussion should be scheduled with senior team members with oversight of the pathway to review service provision. In the event that there is insufficient staff to provide the service, scans should be prioritised in the following order:
  - Anomaly scan at 18+0 -23+0 weeks
  - Ultrasound +/- screening at 11+2 -14+1
  - Growth scans

If, for any reason, an ultrasound examination is not possible the quadruple test can be offered based on the Last Menstrual Period (LMP) between 14<sup>+2</sup> to 20<sup>+0</sup> weeks.

- Growth scans: “To reduce the workload to the ultrasound screening unit a local policy should be implemented to review all referrals for a growth scan prior to booking an appointment”.

It is also worth reviewing the RCOG (2020) [guidance for fetal medicine units](#) (FMU). This guidance suggests that if delay is not clinically acceptable precautions should be taken and PPE should be worn in line with [PHE guidance](#). It also advises that

“If capacity allows the FMU should support staff or capacity shortages in antenatal ultrasound. Scans should be prioritised in order of clinical urgency by a senior fetal medicine doctor, with the following suggested priority:

- Urgent scans for fetal growth (e.g. where there is already a suspicion/diagnosis of growth restriction, or for persistently reduced fetal movements).
- Anomaly scan at 18+0 -23+0 weeks
- Ultrasound +/- screening at 11+2 -14+1
- Growth scans”

### **Should we be cancelling non-urgent examinations?**

This will depend on local staffing levels and will need to be monitored on a regular basis. Any decisions should be made within the wider Trust contingency planning, to reduce risk to patients and staff. It is however recommended that restrictions of non-essential relatives within departments and scan rooms should be considered in order to minimise risk to staff and patients.

### **Will we be covered if we ration services due to unprecedented challenges?**

NHS Resolutions are not able to provide specific advice, but suggest responded to enquiries from SCoR stating “Should claims arise from any such rationing, the courts in future would be expected to take account of extreme national circumstances when reaching a decision on legal liability, but it is impossible at this point to gauge precisely where they would set the boundaries of negligence in such a situation. If your members are employed by NHS trusts or other healthcare organisations belonging to our schemes, they will still be protected by our indemnity+”

## Other resources

[American Institute of Ultrasound in Medicine](#): various including YouTube links to point of care ultrasound in Covid-19.

[International Society of Ultrasound in Obstetrics and Gynecology](#): links to webinars, guidance and updates

### Point of care ultrasound

There are many articles and websites about how to use ultrasound in the diagnosis of lung disease such as:

Falcetta et al (2018) [The role of lung ultrasound in the diagnosis of interstitial lung disease](#). Shanghai Chest, 2 (5).

Huang et al (2020) [A Preliminary Study on the Ultrasonic Manifestations of Peripulmonary Lesions of Non-Critical Novel Coronavirus Pneumonia \(Covid-19\)](#). Also available at <http://dx.doi.org/10.2139/ssrn.3544750>

Qian-Yi P et al (2020) [Findings of lung ultrasonography of novel corona virus pneumonia during the 2019. 2020 epidemic](#)  
[Features of lung ultrasound in COVID 19 infection](#)

### Preparing for Covid-19

Mossa-Basha et al (2020) [Radiology Department Preparedness for COVID-19: Radiology Scientific Expert Panel](#). Radiology 0 0:0

## **Appendix 1 ([RCOG 2020](#)):**

Appendix A: Template (that can be adapted with local details) for maternity services to use if they wish Information for pregnant women who cannot have their scheduled appointment today and need to have their appointment rescheduled due to COVID-19.

If you have [symptoms of COVID-19](#) you must not attend your appointment but phone your maternity service for advice.

**Maternity units may wish to provide additional information to pregnant women which includes the following:**

- Reason they are unable to have their appointment today for example: they have suspected Covid-19 or have been in contact with someone who has recently had the infection.
- When they will have their appointment rescheduled.
- How they will be contacted about the new appointment date.
- If they don't hear from maternity service (it would be advisable to have a time frame for example if you don't hear within 1 week please contact), how and who they should contact