

Bath, North East Somerset, Swindon and Wiltshire (BSW), Infection Prevention and Control Best Practice guidance for Spirometry

Scope of Guidance

This guidance is issued by the BSW system and outlines guidance to support the reinstatement of Spirometry in the primary care setting and ensure reduction in transmission of respiratory tract infections.

This guidance is subject to change in line with updates to national, local, and professional body advice and guidance. Organisations who adopt practices that differ from those recommended within this guidance are responsible for ensuring safe systems of work, including the completion of a risk assessment approved through their local governance procedures.

NHS organisations should ensure reliable application of all Infection Prevention and Control (IPC) measures and gain assurance on adherence; including but not limited to; ventilation, social distancing, hand hygiene, environmental cleanliness and use of appropriate Personal Protective Equipment (PPE).

Organisations must ensure that IPC policies are in place, up to date and in line with current national guidance.

Organisations must ensure that staff have an in date individual risk assessment by employer/line manager. It is anticipated that most staff undertaking spirometry will have been vaccinated in line with national recommendations.

Staff undertaking spirometry are required to be appropriately trained health care practitioners who are deemed competent within their practice to perform quality assured diagnostic spirometry. Those responsible for providing spirometry are required to have risk assessed the process and ensured that all aspects are safe for both staff and patients.

Spirometry only forms one element of a diagnostic process for respiratory diseases and should not be the sole basis of any diagnosis. Commencing any treatment (i.e. inhalers) and other referrals (secondary care) should not be delayed due to lack of spirometry results.

Spirometry equipment must be maintained as per manufacturer advice including annual servicing. Calibration of the device must also be performed as recommended, and records kept locally for audit purposes.

Staff undertaking spirometry are aware that, risk cannot be completely abolished, though the following guidance should act to minimise risk to both staff and patients.

INFECTON PREVENTION AND CONTROL

Spirometry is not considered to be an Aerosol Generating Procedure (AGP), however, spirometry associated cough has the potential to generate droplets necessitating a mitigation strategy, including, but not limited to;

- Patients should be pre-counselled about what actions to take if they start to cough, including try to stay on the mouthpiece if possible, to cough into a Surgical mask, these

must be available nearby if they need to come off the device to cough into this.

- Spirometry should be performed with a single use in-line Bacterial-Viral Filter (BVF) that meets ATS/ERS standards.
- The spirometer must be cleaned between patients as per manufacturer's specific instructions and local organisations IPC policy. As a minimum, the outer casing of the transducer and parts that come into contact with a patient must be cleaned with antibacterial/viral wipes as indicated by manufacturers, alcohol wipes may however be recommended by some manufacturers. A record of cleaning must be maintained locally for audit purposes. **Appendix I** of this document shows an example of a cleaning record.
- Routine cleaning of the environment should take place between patients following the national guidance recommendations using either:
 - a) Combined detergent/disinfectant solution at a dilution of 1000ppm available chlorine (av.cl), or
 - b) General purpose neutral detergent in a solution of warm water, followed by a disinfectant solution of 1000ppm av.cl
- Operators will need PPE consisting of gloves, apron, visor and Type IIR (surgical) mask. Please refer to guidance on donning and doffing to avoid self-contamination. [Guide to donning and doffing PPE: Droplet Precautions \(publishing.service.gov.uk\)](#)
- A Perspex screen, large enough to obstruct the space, between patient and clinician *can be used* to offer an additional physical barrier for protection. This must be included as part of the cleaning regime between each patient if being used.
- If the room chosen to perform spirometry in does not have mechanical ventilation, then natural ventilation must be used. This is achieved through opening windows.
- The use of ventilation purge period may also be considered if there are concerns over patient privacy with open windows during consultation. Further information on ventilation can be found in NHSE/I (HTM 03-01) Specialised ventilation for healthcare buildings <https://www.england.nhs.uk/publication/specialised-ventilation-for-healthcare-buildings/>
- ~~Non-consecutive bookings of spirometry patients in a clinic are necessary to allow time for cleaning between patients.~~
- [Patient with profound immune vulnerability \(e.g. post-transplant or immunosuppressed\), should be considered at increased risk; please discuss with local clinical leads⁷](#), as per ARTP guidance. These patients should be seen at the start of the clinic to further mitigate any risk of cross infection.

PATIENTS

The clinician undertaking spirometry is responsible for booking, patient risk assessment, appropriateness and triage, including, but not limited to;

- Identified as needing spirometry by an appropriate health care professional, risk assessed, booking and prioritised.
- If spirometry is deemed not appropriate on the day it is the responsibility of the clinician to inform the referring clinician.
- The clinician must ensure all patients are COVID-19 risk assessed and screened prior to their procedure, ensuring the patient is not displaying any [signs or symptoms of COVID-19⁸](#).
- Patients are required to wear a mask during the appointment, attend alone, if possible, and only remove when instructed to perform

spirometry.

Appendix II provides an example of a pre-appointment COVID-19 screening questionnaire.

Patients should be advised that if they have any COVID symptoms, are a confirmed COVID case they should not attend the surgery or practice and should call for further advice.

Appendix I

Example cleaning records

Date	Time	Cleaned with

Appendix II

Pre-appointment COVID-19 Screening Questionnaire example

To keep our staff and our patients safe we are required to update patient's medical histories and assess everyone's status. Therefore, we will need to ask you some questions before your appointment/on the day.

We will be contacting patients prior to their appointment. If the answers change before your appointment, please let the surgery/medical centre know as soon as possible.

Questions	Yes	No
1. Have you tested positive for COVID-19 in the past 10days?		
2. Are you waiting for a COVID-19 test result? For example following travel abroad		
3. Have you been notified in the last 10 days that you are a contact of a person who has tested positive with COVID-19?		
4. Have you had a high temperature (Above 37.8°C)?		
5. Do you have any of the following symptoms <ul style="list-style-type: none">• a new, continuous cough – this means coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours• a loss or change to your sense of smell or taste• shortness of breath• feeling tired or exhausted• an aching body• a headache• a sore throat• a blocked or runny nose• loss of appetite• diarrhoea• feeling sick or being sick		

If you answer no to ALL the *above questions*, an appointment will be made for you for spirometry (Breathing tests).

If you answer yes to ANY of the *above questions*, we will need to defer your appointment as per Government guidance. If you answered no to ALL the *above questions*, please answer:

Thank-you for your time in answering these questions, please sign the form, confirming the below statement.

I have read and understood the questions I have been asked in relation to my health and have provided accurate answers

Signed..... Date
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IPC