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# How to pass your European Spirometry Driving test!

The information in this editorial is designed to inform *Breathe* readers about the European Spirometry training programme leading to the ERS Spirometry Driving Licence.

The vital role of spirometry in the diagnosis and management of respiratory disease is undisputed [1, 2]. Standardisation of spirometry, access to spirometers and use of accurate and reliable spirometry measurements are requirements central to the treatment of lung diseases [3, 4].

Are you aware that:

- Spirometry is grossly underused in practice, especially in primary care? [5, 6]
- Diagnosis made on inaccurate results has been reported regularly within the literature? [7]
- Many countries lack the delivery of training in quality diagnostic spirometry? [8]

## Use of spirometry in practice

European Respiratory Society (ERS) have recognised the need to standardise spirometry practice with the publication of the ERS/American Thoracic Society (ATS) guidelines, Standardisation of Lung Function Testing 2005 [4]. In recent years, a number of new spirometers have been introduced to the market, some of which have been

independently validated and the ERS Buyers' Guide also offers guidance to those performing spirometry in practice. However, to date, there has been relatively little achieved in the standardisation of training and education in spirometry measurement across Europe. Although efforts have been made in a number of European countries to train health professionals at a national and local level, results of an ERS survey 2012 highlight that content and duration of training vary widely and few training programmes are recognised by a professional body [8].

What do we learn from this? Although a number of quality spirometers are now available with guidelines available on lung function testing, no standardised training or certification are available to those performing spirometry testing in many EU countries. The result is both the misuse [7] and underuse [5] of spirometry in practice.

## European Spirometry Driving Test

The aim of the European spirometry training programme is to establish a standardised framework for the education, training and certification to enable those who achieve the qualification to be able to deliver competently high quality diagnostic spirometry in practice.

### Statement of Interest

S. Mitchell is an employee of ERS.



The diagram above indicates that training has been structured into two distinct parts.

## Part 1 of the European Spirometry training programme

### What topics will be covered?

Part 1 will focus on the theoretical knowledge and basic skills for spirometry testing. The following key areas will be covered;

- Module 1: Anatomy, physiology and pathophysiology required for spirometry
- Module 2: Definitions of spirometric values
- Module 3: Spirometry equipment
- Module 4: Indications and contraindications of spirometry testing
- Module 5: Spirometry technique
- Module 6: Quality assurance
- Module 7: Evaluation of spirometric results

### How can I register to attend Part 1 of the spirometry training programme?

ERS will deliver the inaugural Part 1 course during the ERS Annual Congress, Barcelona, in September 2013. Participants will be required to attend the following:

**Saturday 7th September 2013** Postgraduate course PG16 “Spirometry knowledge and basic skills”

**Tuesday 10th September 2013** Educational Skills workshop ESW7, ESW8 or ESW9 “Spirometry knowledge and basic skills”

The educational skills workshop will be

repeated three times throughout the day. Participants are only required to attend one of these educational skills sessions.

To register for each of these course sessions, you will need to visit the ERS congress website ([www.erscongress2013.org/spirometry](http://www.erscongress2013.org/spirometry)) and log into your myERS account.

### Do I need to prepare materials before attending Part 1?

Once you have registered to attend both the PG16 and the educational skills workshop in Spirometry knowledge and basic skills, you will be entitled to access the new ERS Spirometry website. Access to the site is restricted to those who intend to participate on Part 1 of the training programme and information will be provided to registered participants via the ERS headquarters.

Prior to the course, all participants will be required to read and study the information provided on each of the modules. For two of the modules, we ask participants to complete a short quiz prior to the course. The aim of the ERS website is to offer both participants and teachers of spirometry access to varied resources on the key areas for performing and interpreting spirometry.

### How do I get my certificate Level 1 European Spirometry Driving Licence?

All participants who complete each of the steps above will be entitled to take an online

MCQ test. This test is designed to assess the knowledge required to perform spirometry. Once you have successfully completed this online knowledge test, you will be awarded Level 1 of the European Spirometry Driving Licence.

For those participants who wish to become competent at performing high quality spirometry measurement, they must continue to Part 2 of the programme.

## Part 2 of the European Spirometry training programme

### *What topics will I cover?*

Part 2 of the training programme is comprised of self study as well as attending a one-day training programme. Following successful completion of the online knowledge test, participants will have the opportunity to attend Part 2 training covering the following modules;

- Module 3: spirometry equipment – small group hands on learning
- Module 5: technique for performing spirometry – small group hands on learning
- Module 6: quality assurance – lectures, problem based learning, case based discussions
- Module 7: evaluation of spirometry results – case study presentations, discussion on workbook assignments
- Module 8: Spirometry service management – interactive lectures
- Questions & Answers session
- Practical Assessment – individual assessment of candidate workbooks and practical test

All participants who attend Part 2 will be required to complete a practical assessment onsite. During this assessment, candidates will be examined on practical aspects of spirometry. Trainers will also use the completed workbook as a basis for discussion during the assessment.

### *How can I register to attend Part 2 of the spirometry training programme?*

Only those participants who have attended Part 1 during the ERS congress are entitled to register for Part 2 of the training programme which will take place as a one-day school course on 7 March 2014, Barcelona, Spain.

All participants attending Part 1 of the training programme will receive information

on next steps and how to register for Part 2. Registration will be open to participants in September 2013 after the ERS congress.

Information about Part 2 of the European Spirometry training programme may be found on the ERS website [www.ersnet.org/courses](http://www.ersnet.org/courses)

### *Are there pre-requisites required to attend Part 2?*

Yes all participants will need to complete a number of mandatory pre-requisites before attending Part 2.

1. Attend Part 1 of the training programme during the ERS congress in Barcelona 2013
2. Complete the online knowledge test after attending the ERS congress which will be available on the ERS website
3. Complete the ERS spirometry workbook including a portfolio of spirometry tests and assignments
4. Become familiar with the information available on each of the modules within the ERS spirometry website

This information will be available on the ERS and HERMES websites and for any questions related to the courses participants can contact [hermes@ersnet.org](mailto:hermes@ersnet.org)

### *How do I get my certificate Level 2 European Spirometry Driving Licence?*

During the 1 day training programme on 7 March 2014, participants will be requested to complete a practical assessment onsite. The completed workbook will also form part of the assessment process and in order to be awarded Level 2 of the European Spirometry Driving Licence you will need to successfully pass both the ERS spirometry workbook as well as the practical assessment.

ERS will disseminate certificates to those candidates who successfully complete the training programme.

## Next steps: what is my role as an ERS member and Breathe reader?

There is little doubt that a vast number of health professionals can benefit from this training not only within but also beyond our ERS membership pool. It is hoped in the future that this educational programme will be adopted and sponsored by national societies and universities who may wish to implement a standardised training structure in spirometry.

ERS members do have an important role to play in disseminating this valuable initiative. Are you aware of colleagues within or outside your institution who may benefit from training in spirometry? Do you have direct contact with primary care practitioners who again will undoubtedly benefit from this training programme? Are you an experienced lung function technician/scientist or practitioner of spirometry who is interested in delivering this course nationally? This course is aimed not just at those with a direct clinical role, but also those people using spirometry in clinical research trials.

If you would like further information on how to become a spirometry trainer for your country, please visit [www.ersnet.org/courses](http://www.ersnet.org/courses) and click on European Spirometry train-the-trainer course.

With the support of the ERS headquarters, the spirometry HERMES task force look forward to implementing a structured and certified competence training in spirometry not only within Europe but also worldwide. Quality diagnostic spirometry testing can make a difference to lung health but relies on the support of health professionals in the field willing to campaign, advocate and partake in this important project.

## References

1. Rabe KF *et al.* Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease GOLD Executive Summary. *Am J Respir Crit Care Med* 2007; 176: 532–555.
2. Derom E, Van Weel C, Liistro G, Buffels J, Schermer T, Lammers E, Wouters E, Decramer M, Primary Care Spirometry. *Eur Respir J* 2008; 31:197–203.
3. Cooper BG, Steenbruggen I, Mitchell S, *et al.* HERMES Spirometry: the European Spirometry Driving Licence Breathe 2011; 7: 259–275.
4. Miller MR, Hankinson J, Brusasco V, *et al.* Standardisation of spirometry. *Eur Respir J* 2005; 26: 319–338.
5. Bellia V, Pistelli R, Catalano F, *et al.* Quality control of spirometry in the elderly: The S.A.R.A. study: Salute Respiration nell'Anziano - Respiratory Health in the Elderly. *Am J Respir Crit Care Med* 2000; 161: 1094–1100.
6. Jordan REE, Lam KHB, Cheng KKK, *et al.* Case finding for chronic obstructive pulmonary disease: a model for optimising a targeted approach. *Thorax* 2010; 65: 492–498.
7. Cleland J, Mackenzie M, Small I, *et al.* Management of COPD in Primary Care in North-East Scotland. *Scott Med J* 2006 Nov; 51 (4): 10–14.
8. Steenbruggen I, Mitchell S, Cooper BG. ERS European Spirometry train-the-trainer programme: good trainers are made, not born *Breathe*; 2012 8 no 4: 263–266.