

**ATTACHMENT F**

**Approved Spirometry Refresher Course Application**

## TRAINING REQUIREMENTS OF THE COTTON DUST STANDARD

Authority for approval of training courses in pulmonary function testing as required in the Cotton Dust Standard, 29 CFR 1910.1043, has been delegated to the National Institute for Occupational Safety and Health.

Application for approval should be submitted to:

Kathleen A. Clark , PhD MS RRT  
CDC/NIOSH  
Respiratory Health Division Mail Stop H-G900.2  
1095 Willowdale Road  
Morgantown, West Virginia 26505-2888

The Pulmonary Function Testing Course Approval application which provides guidelines for faculty, content, and equipment is attached along with model course objectives and Appendix D of the Standard.

In order to expedite processing of applications for approval, it would be appreciated if you electronically submit your copy of all material requested to:

KathleenLu-Ann F. Beeckman-Wagner, Ph.D.  
Health Scientist/Epidemiologist  
Respiratory Health Division

CDC/NIOSH  
[KClark8@cdc.gov](mailto:KClark8@cdc.gov)

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Public reporting burden for this collection of information is estimated to average 8 hours per course application and 30 minutes for reporting changes to applications, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this information, including suggestions for reducing this burden to CDC, Project Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA 30333, Attn: PRA (0920-0138). Do not send the completed form to this address.

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NIOSH-Approved Spirometry Refresher Course Application

Please carefully complete all the questions below (print or type). You will be requested at the end of this form to certify that in your professional judgment, you meet these minimum requirements.

1. Name, Address, Telephone Number, and NIOSH Course Sponsor #:

NIOSH-Approved Course Sponsor # \_\_\_\_\_

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2. NIOSH-Approved Course Director(s) who will offer the Refresher Course for this sponsor:

Course Director's Name	E-mail address for correspondence
1.	
2.	
3	
4.	
5.	
6.	

3. Course Faculty Qualifications:

The course director shall assure that the lecturers have adequate educational backgrounds and experience to cover the required material. Please list faculty members who plan to teach in your NIOSH-Approved Spirometry Refresher Course. Only faculty pre-approved by NIOSH may teach in any NIOSH-approved spirometry course. If you want someone to teach in the refresher course who has not already been approved by NIOSH, please forward a request to NIOSH for their approval and include a current CV from that individual.

NIOSH-Approved Spirometry Refresher Course Faculty
1.
2.
3.
4.
5.

4. Student Eligibility:

Only students who have successfully completed the initial NIOSH-Approved Spirometry Training Course are eligible to take the NIOSH-Approved Spirometry Refresher Course. Students must provide a copy of their certificate to the course sponsor for verification. (After 2012, students with a course certificate that is more than 5 years old will need to complete the introductory course again before taking the Refresher Course).

5. Course Design and Content:

Communication with course attendees prior to the course should include information on specific types of spirometers that the students currently use or intend to use. It is highly recommended that students submit examples of spirograms they have collected. The course director could then identify common areas that need to be reviewed and tailor each course according to the class needs.

a. Course Design:

The course should consist of approximately 7 hours of instruction. NIOSH does not deem it appropriate that the NIOSH-Approved Spirometry Refresher Course curriculum be a repeat of day 1 training of the NIOSH-Approved Spirometry Course, nor does NIOSH deem it appropriate that both the introductory and refresher training courses be conducted on the same day using the same faculty and practicum equipment. The objectives for the Spirometry Refresher Training are attached to this application.

- b. Minimum Course Content for the requirements in (4.a.) should include:
1. Review of the most recent ATS/ERS testing standards and guidelines,
  2. Review of technical procedures and instrumentation requirements including calibration procedures, sources of error, and their correction for both volume displacement and flow measuring spirometers,
  3. Review of the effective use of volume-time and flow-volume displays,
  4. Differentiation of obstructive from restrictive disease patterns on the spirograms,
  5. Review of common spirometry testing errors and applicable corrective actions.

**An agenda showing lecture topics, time allocations, and lecturers' names should be attached to this application.**

6. Instructor Manual/Student Manual

The instructor's guide and student manual should adequately cover the required course content (Item 4b above). Submit with this application one copy each of all materials to be distributed to the students, as well as one copy of each audio-visual program (video, DVD, PowerPoint presentations, etc.) you may use in the instruction of your class. The AV program(s) will be returned to you after your application has been reviewed.

7. Certificate of Course Completion:

A certificate showing satisfactory completion of the NIOSH Refresher Training Course must be provided to each trainee. The certificate should include the sponsor's name, course date, course director's name and signature, and the NIOSH Course Approval Number. There should be a statement on the certificate that indicates the certificate is valid for 5 years from the course date. It may include any CEUs awarded. A sample of the certificate must be attached to this application.

**NOTE:** NIOSH's approval of the course means that it meets the minimum technical requirements for teaching spirometry testing. **It does not constitute certification of individuals completing the course by NIOSH.**

8. Notification Procedures:

Any changes in course faculty or content must be reported to NIOSH for approval. All dates of prospective Refresher Courses must be submitted to NIOSH at least 30 days prior to such courses. (Telephone or electronic notification, as soon as course date is known, is required in cases when a course is scheduled without time for the 30 day notice).

The sponsor will provide NIOSH with course dates and the number of students for each course completed on an annual basis, or sooner if the sponsor wishes. An electronic reporting form is available on the NIOSH internet for this purpose.

Course Director Certification

I certify that course content, materials, and faculty are adequate and meet minimum requirements. I have completed this form as accurately and fully as possible. I understand that if during a NIOSH site visit the course does not comply with the application criteria and statement I have made, approval will be withdrawn.

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Course Director Signature

Date