

# 2020 Practical Spirometry Refresher Courses

Presented by  
**Division of Pulmonary and Critical Care**  
**Mayo Clinic, Rochester, Minnesota**

## *A NIOSH-approved Spirometry Training Sponsor*

### **Course Overview and Objectives**

This refresher course is approved by the **National Institute for Occupational Safety and Health (NIOSH)** and ensures persons performing spirometry testing learn the current spirometry standards and guidelines published by the American Thoracic Society/European Respiratory Society.

By the end of this course, participants should be able to:

- Explain spirometry instrument requirements and infection control procedures.
- Perform leak check, calibration check and linearity testing.
- Demonstrate proper spirometry testing technique for persons of various ages and state of health.
- Demonstrate how to use flow-volume and volume-time tracings to recognize errors in testing and to explain the corrective action.
- Explain the ATS/ERS criteria for determining acceptability of maneuvers and test repeatability.
- Explain the interpretative strategy for common disease patterns from the numeric results and spirogram tracings.

### **Disclaimer**

Attendance at this Mayo Clinic course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

### **Intended Audience**

This refresher course is designed for health professionals involved in performing spirometry tests in both industrial and clinical settings. Individuals must have completed either the NIOSH-approved Initial Course or a NIOSH-approved Spirometry Refresher Course within the last 5 years to qualify for this course. ***A copy of a valid NIOSH certificate must accompany the registration form to verify eligibility.***

### **Credit**

This continuing education activity was approved for **8.0** contact hours through the American Association of Occupational Health Nurses, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation **until 2/7/2020 only**. Please note: no CEU's will be awarded after this date from the AAOHN for this course.

This program has also been approved for **8.0** Continuing Respiratory Care Education (CRCE) credits by the American Association for Respiratory Care.

Other health care professionals will be provided a certificate of attendance for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

**Program Change:** Effective January 1, 2009, NIOSH changed the time limits on all certificates to 5 years from the course date. Previously awarded certificates are no longer valid indefinitely. Individuals who choose to have a valid NIOSH certificate must either take a NIOSH-approved Spirometry Refresher Course within 7 months post certificate expiration date or retake the initial 2 day course.

### **Course Director**

***Alexander S. Niven, MD***

Associate Professor of Medicine  
Medical Co-director, Pulmonary Function Laboratories  
Mayo Clinic, Rochester, Minnesota

### **Course Coordinator & Instructor**

***Tera Hagen, CPFT***

Quality Assurance Technologist  
Mayo Clinic, Rochester, Minnesota

### **Course Faculty**

The instructors are credentialed pulmonary function technologists, respiratory therapists and physicians with extensive experience in spirometry testing. During the workshops they will teach the students how to recognize suboptimal efforts and poor test quality.



## A Note from NIOSH

The Cotton Dust Standard (29 CFR 1910.43) promulgated by Occupational Safety and Health Administration (OSHA) in 1978 and amended December 13, 1985, states:

*“Persons other than licensed physicians, who administer the pulmonary function testing required by this section shall have completed a NIOSH-approved training course in spirometry.”*

When NIOSH approves a course, it is attesting that the course meets the minimum OSHA/NIOSH criteria for teaching individuals to perform spirometry in multiple industries. This does not mean that the individual taking the course is certified as a pulmonary function technician by NIOSH. Students have merely completed a NIOSH-approved course.

**Registration** (Class size is limited. Early registration is encouraged.)

For additional details on this course, contact Teresa Krukow at 800-533-1653 or 507-284-8403. The registration fee for this course includes: tuition, course manual and classroom supplies, exam, certificate, food and beverages(if available). Parking fees are not covered.

Please complete the registration form below and send, **along with a copy of your certificate** from the previous initial or NIOSH-approved Refresher Course you attended and **3 de-identified subject/patient tests**, to:  
Teresa Krukow (krukow.teresa@mayo.edu)  
200 First Street SW – Gonda 18 East  
Rochester, MN 55905  
**Fax 507-266-2474**

**NOTE:** *Students should not make non-refundable flight reservations until after the course deadline and an email confirmation letter is received.*

## Cancellation

Your registration fee, less a \$75 administrative fee, will be refunded when written notification is received by our office two weeks prior to the course.

## Accommodations

### Minnesota:

Visit [www.mayoclinic.org/travel-rst](http://www.mayoclinic.org/travel-rst) for a list of hotels and other important information when traveling to Rochester.

### Arizona:

Visit [www.mayoclinic.org/travel-sct/lodging.html](http://www.mayoclinic.org/travel-sct/lodging.html) for a list of hotels in the Mayo Clinic-Phoenix campus area. (Residence Inn Phoenix Desert View at Mayo Clinic is on campus. For other hotels, select hotels near Mayo Clinic Hospital)

### Florida:

Visit [www.mayoclinic.org/becomingpatient-jax/lodging.html](http://www.mayoclinic.org/becomingpatient-jax/lodging.html) for a list of hotels in the Jacksonville area.

# REGISTRATION FORM

Please indicate below which course you will be attending.

Refresher Course Dates and Times	Course Location	Registration Due Date
<input type="checkbox"/> February 6, 2020 8:00am – 5:00pm	Mayo Clinic, Rochester, MN	January 6, 2020
<input type="checkbox"/> April 17, 2020 & April 18, 2020 2:30pm – 5:00pm 8:00am – 2:30pm	Mayo Clinic Hospital, Phoenix, AZ	March 17, 2020
<input type="checkbox"/> October 15, 2020 & October 16, 2020 4:30pm – 7:00pm 8:00am – 2:30pm	Mayo Clinic, Jacksonville, FL	September 15, 2020
<input type="checkbox"/> November 19, 2020 8:00am – 5:00pm	Mayo Clinic, Rochester, MN	October 19, 2020

Please indicate which course manual you would prefer.

Manual Options	Fee	Comments
<input type="checkbox"/> USB Flash Drive Workbook	\$350.00	Requires personal computer
<input type="checkbox"/> Printed 3 Ring Binder Workbook	\$375.00	Additional \$25 fee

**Please print.** Duplicate form for multiple registrations.

Formal Name (as you want it to appear on your class certificate)		Title (LPN, RN, PA, PhD, MD or other)	
Company/Institution		Phone (including area code)	
Address		Fax (including area code)	
City	State	Zip Code	E-mail (required)
Years of experience in spirometry:	Indicate spirometer model and name you are currently using :		How do you want your first and last name to appear on your nametag?
<b>IMPORTANT: NIOSH requires you submit subject tests as a course requirement. Please include 3 de-identified subject reports with your registration.</b>			Do you have any special needs? If so, please explain:

Registration fee is <b>\$350</b> with USB Flash Drive  <b>\$375</b> with 3 Ring Binder  (\$100 or \$75 account transfer for Mayo employees)	<b>Payment Method</b> <input type="checkbox"/> Check—payable to Mayo Clinic <input type="checkbox"/> Visa* <input type="checkbox"/> Mastercard* <input type="checkbox"/> Discover* <input type="checkbox"/> American Express**  <input type="checkbox"/> Mayo Clinic employee	Credit Card No. _____ Exp. Date: _____ (MM/YY) *3 digit code on back _____ **4 digit code on front _____ Name on card _____ Billing address on card _____ City, State, Zip code _____  Company number _____ PAU _____
	<b>ATTENTION: If paying by check, make out to: Mayo Clinic</b> <b>Please fax or email this registration form, previous NIOSH certificate, 3 de-identified patient tests and mail check to:</b> Teresa Krukow, Gonda 18 East, Mayo Clinic, 200 First Street SW, Rochester, MN 55905 Fax 507-266-2474 Email: <a href="mailto:Krukow.Teresa@mayo.edu">Krukow.Teresa@mayo.edu</a>	

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