# **UI Respiratory Medical Evaluation and Fit Test Policy**

SUBJECT/TITLE: RESPIRATOR MEDICAL EVALUATION AND FIT TEST POLICY FOR

**UNIVERSITY EMPLOYEES (Non-UIHC)** 

**PURPOSE:** To explain the University policy on respirator medical evaluations and fit

testing that a non-UIHC department must comply with prior to

authorizing employee respirator use in that department.

**DEFINITIONS:** UIHC – University of Iowa Hospitals & Clinics

EHS – Environmental Health & Safety
UEHC – University Employee Health Clinic

HCP - A Licensed Health Care Professional legally permitted to make a

medical determination of employee fitness to use a respirator.

SCBA – Self-contained Breathing Apparatus

#### **POLICY:**

All employees required to wear a respirator must have an initial medical evaluation. For employees not required to wear respirators (which OSHA calls Voluntary Use), medical evaluations are required only if the device has an elastomeric (rubber or silicone) tight-fitting face piece.

Employees required to wear a tight-fitting face piece respirator must have an initial and then annual respirator fit test (an assessment to assure the respirator will fit properly under conditions of use).

The employing department is responsible for ensuring that respirator users complete their medical evaluations and fit tests.

Other requirements for respirator programs are addressed on the EHS website in the EHS document titled "Respirators/Dust Masks – Required and Voluntary." Other requirements include hazard assessments, assignment of Respirator Program Administrators, department specific written program, respirator selection, routine and foreseeable emergency situations, respirator maintenance, training, recordkeeping, and ongoing program evaluations.

#### **MEDICAL EVALUATION:**

A. Prior to initial use, medical evaluations shall be provided to employees required to use a respirator and in cases in which a voluntary-use respirator has an elastomeric tight-fitting face piece. In addition, employees who wear an SCBA are required to undergo an annual medical evaluation. UEHC will provide medical evaluations which may consist of completing a questionnaire or seeing the HCP, or both, at the discretion of the HCP. Employees

scheduled to go to the UEHC will need to fill out the OSHA required Respirator Fitness Questionnaire and bring it with them to their appointment.

- B. Additional medical evaluations are required under any of the following circumstances:
  - If an employee reports medical signs or symptoms related to ability to use respirator;
  - If the physician or other licensed healthcare provider, program administrator, supervisor recommends reevaluation;
  - If information from the respirator program, including observations made during fit testing and program evaluation, indicates a need; or
  - If a change occurs in workplace conditions that may substantially increase the physiological burden on an employee.
- C. Medical evaluations will include:
  - 1. A medical history, including previously diagnosed disease, particularly known cardiovascular or respiratory diseases;
  - 2. Psychological problems or symptoms including claustrophobia;
  - 3. Problems associated with breathing during normal work activities;
  - 4. Past problems with respirator use;
  - 5. Past and current usage of medication; and
  - 6. Any known physical deformities or abnormalities, including those which may interfere with respirator use.
- D. The following may disqualify an employee from wearing a respirator:
  - 1. Facial deformities and facial hair, where the respirator forms a seal to the face;
  - 2. Perforated tympanic membranes;
  - 3. Respiratory diseases affecting pulmonary function;
  - 4. Symptomatic coronary artery disease, significant arrhythmias, or history of recent myocardial infarction;
  - 5. Endocrine disorders which may cause the employee to suffer sudden loss of consciousness or response capability;
  - 6. Inability to perform coordinated movements and conditions affecting response and consciousness due to neurological disabilities;
  - 7. Use of medications that affect judgment, performance or reliability or alter the state of awareness or consciousness;
  - 8. A history of claustrophobia may require further evaluation; or
  - 9. Any other condition which the physician believes might require special restriction.

#### **FIT TESTS:**

A. After written receipt of medical clearance from UEHC is received, each employee required to wear a tight-fitting face piece respirator must pass a respirator fit test. A fit test is not required for loose fitting helmet or hood respirators or for "not required" (voluntary) use respirators.

- B. Ensuring that fit tests are completed is the responsibility of the department or laboratory in which the employee works. The fit tests can be contracted out or EHS will provide fit test procedure training if the department or laboratory decides to perform their own fit tests.
- C. Fit testing will be performed before initial use of a respirator, annually thereafter, and whenever conditions (such as employee's physical condition) change that could affect respirator fit.
- D. The fit test shall be administered using the OSHA-accepted protocol found in Appendix A in 29 CFR 1910.134, the OSHA respirator standard. Fit testing requires the respirator user to handle the respirator, have it fitted properly, test the face piece-to-face seal, and to wear it in normal air for a familiarity period. The fit test must be performed using the same make, model, style, and size respirator the employee will use. [Please note that separate respirator training is also required.]
- E. Respirators requiring a protection factor of more than 10 must be fit tested using a quantitative method with a challenge agent.

#### REFERENCES AND CORRESPONDING POLICIES:

Occupational Safety and Health Administration (OSHA) respirator standard: 29 CFR 1910.134.

Respirators/Dust Masks – Required and Voluntary (EHS website)

Date Approved: 3/29/10 Date Effective: 4/1/10

Date Revised: Date Reviewed:

# UNIVERSITY EMPLOYEE HEALTH CLINIC (UEHC)

#### RESPIRATOR FITNESS QUESTIONNAIRE

## Page 1 of 2

The University of Iowa Employee Health Clinic (UEHC) requests this information for the purpose of assuring patient care. This is confidential medical information and the UEHC does not routinely provide this information without your written consent.

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ID#

**NAME** 

**BIRTHDATE** 

IF NOT IMPRINTED, PLEASE PRINT DATE, ID#, NAME

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Can you read? (circle one) YES / NO

Please print) 'oday's date:	Employee job title:		
Employee name:	Day time phone #:		
Employee age: Sex: Male/Female	Height:ftin.	Weight:lbs.	
Check the type of respirator you will use (you may N, R, or P disposable respirator (filter mask, Other type (for example, half- or full-face pie	non-cartridge type only)	ed-air, self-contained breathing	apparatus

#### Questions 1 to 9 - Mandatory

#### CIRCLE APPROPRIATE ANSWERS (No/Yes and circle corresponding letters)

- 1. Do you **currently** smoke tobacco or have you smoked tobacco in the last month? No/Yes
- 2. Have you ever had any of the following conditions? No/Yes
  - a. Seizures (fits)
  - b. Diabetes (sugar disease)
  - c. Allergic reactions that interfere with your breathing
  - d. Claustrophobia (fear of closed-in places)
  - e. Trouble smelling odors
- 3. Do you  ${\color{blue} \textbf{currently}}$  take medication for any of the following problems? No/Yes
  - a. Breathing or lung problems
  - b. Heart trouble
  - c. Blood pressure
  - d. Seizures (fits)
- 4. Have you ever had any of the following pulmonary or lung problems? No/Yes
  - a. Asbestosis

g. Silicosis

b. Asthma

- h. Pneumothorax (collapsed lung)
- c. Chronic bronchitis
- i. Lung cancer

d. Emphysema

j. Broken ribs

e. Pneumonia

k. Any chest injuries or surgeries

f. Tuberculosis

l. Any other lung problem that you've been told about

NAME:	
LIEHC	

ID#

#### RESPIRATOR FITNESS QUESTIONNAIRE (cont'd)

5. Do	you <b>currently</b>	have any	of the following	symptoms of	pulmonary of	r lung i	illness? No/Yes
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- a. Shortness of breath
- b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline
- c. Shortness of breath when walking with other people at an ordinary pace on level ground
- d. Have to stop for breath when walking at your own pace on level ground
- e. Shortness of breath when washing or dressing yourself
- f. Shortness of breath that interferes with your job
- g. Coughing that produces phlegm (thick sputum)
- h. Coughing that wakes you early in the morning
- i. Coughing that occurs mostly when you are lying down
- j. Coughing up blood in the last month
- k. Wheezing
- 1. Wheezing that interferes with your job
- m. Chest pain when you breathe deeply
- n. Any other symptoms that you think may be related to lung problems
- 6. Have you **ever had** any of the following cardiovascular or heart problems? No/Yes
  - a. Heart attack
  - b. Stroke
  - c. Angina
  - d. Heart failure
  - e. Swelling in your legs or feet (not caused by walking)
  - f. Heart arrhythmia (heart beating irregularly)
  - g. Any other heart problem that you've been told about
  - h. Have you ever had any treatment for any of the above in the past 10 years?
- 7. Have you **ever had** any of the following cardiovascular or heart symptoms? No/Yes
  - a. Frequent pain or tightness in your chest
  - b. Pain or tightness in your chest during physical activity
  - c. Pain or tightness in your chest that interferes with your job
  - d. In the past two years, have you noticed your heart skipping or missing a beat
  - e. Heartburn or indigestion that is not related to eating
  - f. Any other symptoms that you think may be related to heart or circulation problems
- 8. If you've used a respirator, have you **ever had** any of the following problems? No/Yes

(If you've never used a respirator, check the following space and go to question 9): \_\_\_\_\_

- a. Eye irritation
- b. Skin allergies or rashes
- c. Anxiety
- d. General weakness or fatigue
- e. Any other problem that interferes with your use of a respirator

9. Would you like to talk about the answers to this questionnaire with the health care	e professiona	d reviewing it?	Yes/No
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	/		
Patient Signature	PLHCP Signature	Date	
	NP/PA/MD Signature		

# UNIVERSITY OF IOWA QUALITATIVE FIT TEST RECORD

Rev. 9/2011

Within the last year, you have been medically clean have a "Respirator Fitness Medical Form". Yes		staff to wear a	respirator and you
Since your last medical evaluation, you have <b>not</b> impact your ability to wear a respirator. Yes N		ny medical sigr	ns or symptoms that
If you answered no to either question, <b>do not</b> pro- request an appointment. Fill out the OSHA questi- to your appointment. Sign on the line immediately	onnaire (see fo		
Employee's signature	D	ate	_
<u>Name</u>	Date		
University I.D.# Job Title_			
Department or Workgroup			
Pos and/or Neg Pressure Check E	mployee Initial	s	
Type of qualitative fit test used			
Name of test operator	Init	ials	
Sensitivity Test: Pass/ Fail Prote	ection Factor	= 10	
# of squeezes needed to detect test solution	10	20 30	
RESPIRATOR BRAND MODEL	SIZE	PASS/F	FAIL?
#1	_ S M L	Р/	F
#2	_ S M L	Р/	F
#3	_ S M L	Р/	F
NOTES:			

This record indicates that you have passed or failed a qualitative fit test as shown above for the particular respirators shown. You are only eligible to wear the respirator types for which you passed a fit test in the last 12 months. If you need or desire any additional type of respirator, you must pass a fit test on that specific type.

## UNIVERSITY EMPLOYEE HEALTH CLINIC (UEHC)

#### RESPIRATOR FITNESS QUESTIONNAIRE

### Page 1 of 2

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ID#

NAME

**BIRTHDATE** 

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Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Can you read? (circle one) YES / NO

respirator. (Please print) Today's date:	Employee job title:	
Employee name:	Day time phone #:	
Employee age: Sex: Male/Female	Height:ftin. Weight:lbs.	
Check the type of respirator you will use (you N, R, or P disposable respirator (filter Other type (for example, half- or full-		apparatus

#### Questions 1 to 9 - Mandatory

#### CIRCLE APPROPRIATE ANSWERS (No/Yes and circle corresponding letters)

- 1. Do you **currently** smoke tobacco or have you smoked tobacco in the last month? No/Yes
- 2. Have you **ever had** any of the following conditions? No/Yes
  - a. Seizures (fits)
  - b. Diabetes (sugar disease)
  - c. Allergic reactions that interfere with your breathing
  - d. Claustrophobia (fear of closed-in places)
  - e. Trouble smelling odors
- 3. Do you **currently** take medication for any of the following problems? No/Yes
  - a. Breathing or lung problems
  - b. Heart trouble
  - c. Blood pressure
  - d. Seizures (fits)
- 4. Have you ever had any of the following pulmonary or lung problems? No/Yes
  - a. Asbestosis

g. Silicosis

b. Asthma

- h. Pneumothorax (collapsed lung)
- c. Chronic bronchitis
- i. Lung cancer
- d. Emphysema e. Pneumonia
- j. Broken ribs

k. Any chest injuries or surgeries

f. Tuberculosis

1. Any other lung problem that you've been told about

#### RESPIRATOR FITNESS QUESTIONNAIRE (cont'd)

5. Do you <b>currently</b> have an	y of the following	symptoms of pulmonary	or lung illness? No/Yes
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- a. Shortness of breath
- b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline
- c. Shortness of breath when walking with other people at an ordinary pace on level ground
- d. Have to stop for breath when walking at your own pace on level ground
- e. Shortness of breath when washing or dressing yourself
- f. Shortness of breath that interferes with your job
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- h. Coughing that wakes you early in the morning
- i. Coughing that occurs mostly when you are lying down
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- 1. Wheezing that interferes with your job
- m. Chest pain when you breathe deeply
- n. Any other symptoms that you think may be related to lung problems
- 6. Have you **ever had** any of the following cardiovascular or heart problems? No/Yes
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  - b. Stroke
  - c. Angina
  - d. Heart failure
  - e. Swelling in your legs or feet (not caused by walking)
  - f. Heart arrhythmia (heart beating irregularly)
  - g. Any other heart problem that you've been told about
  - h. Have you ever had any treatment for any of the above in the past 10 years?
- 7. Have you **ever had** any of the following cardiovascular or heart symptoms? No/Yes
  - a. Frequent pain or tightness in your chest
  - b. Pain or tightness in your chest during physical activity
  - c. Pain or tightness in your chest that interferes with your job
  - d. In the past two years, have you noticed your heart skipping or missing a beat
  - e. Heartburn or indigestion that is not related to eating
  - f. Any other symptoms that you think may be related to heart or circulation problems
- 8. If you've used a respirator, have you **ever had** any of the following problems? No/Yes (If you've never used a respirator, check the following space and go to question 9): \_\_\_\_\_

- a. Eve irritation
- b. Skin allergies or rashes
- c. Anxiety
- d. General weakness or fatigue
- e. Any other problem that interferes with your use of a respirator

9	Would you like to talk about	the answers to this	questionnaire v	with the health	care professional	reviewing it?	Yes/No

	/	
Patient Signature	PLHCP Signature	Date
	NP/PA/MD Signature	

# THE UNIVERSITY OF IOWA Quantitative Fit Test Record

Within the last year, you have been medically cleared by UEHC staff to wear a respirator and you have a "Respirator Fitness Medical Form". Yes No					
Since your last medical evaluation, you have <b>not</b> experienced any medical signs or symptoms that impact your ability to wear a respirator. Yes No					
	out the OSHA questionnaire (	h the fit test. Contact UEHC (at 6-3631) to see following 2 pages) and take with you to your			
Employee's signature		Date			
	QUANTITATIVE FIT T	EST RECORD			
Name	Department				
University I.D	Job Title				
Fit Test Date					
Respirator Brand	Test Operator				
Model	Test Apparatus				
Size	Positive / Negative Pressure	e Check			
FIT TEST ACTIVITY (90 second	ls each)	FIT FACTOR			
NORMAL BREATHING (sitting/s	standing in place, no talking)				
DEEP BREATHING (normal rate	<del>)</del> )				
TURN HEAD SIDE TO SIDE					
MOVE HEAD UP AND DOWN					
SPEAKING (read the rainbow pa	assage, or similar)				
GRIMACE, SMILE, FROWN					
TOE TOUCH					
NORMAL BREATHING					
AVERAGE FIT FACTOR (minim	um required)				
size respirator listed. Employee factor of, meaning whe	is eligible to wear the type of res n used properly and against con	a quantitative fit test for the specific brand, model, and spirator listed above. The respirator has a protection taminants it is approved for, the respirator provides times the acceptable airborne level.			
If the employee needs or desires respirator type.	s to wear an additional type of res	spirator, he/she must take and pass a fit test on that			
Operator Initials	En	nployee Initials			

# UNIVERSITY EMPLOYEE HEALTH CLINIC (UEHC)

# RESPIRATOR FITNESS QUESTIONNAIRE

## Page 1 of 2

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D	A	Т	Ε

ID#

**NAME** 

**BIRTHDATE** 

IF NOT IMPRINTED, PLEASE PRINT DATE, ID#, NAME

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Can you read? (circle one) YES / NO

<b>Mandatory</b> The following information must be provided b respirator. (Please print)	y every employee who has been selected to use any type of
Today's date:	Employee job title:
Employee name:	_ Day time phone #:
Employee age: Sex: Male/Female Height:	ftin. Weight:lbs.
Check the type of respirator you will use (you may check m N, R, or P disposable respirator (filter mask, non-cartr Other type (for example, half- or full-face piece type,	<b>~</b> • • • • • • • • • • • • • • • • • • •
Have you worn a respirator? No/Yes If yes, what type?	

#### Questions 1 to 9 - Mandatory

#### CIRCLE APPROPRIATE ANSWERS (No/Yes and circle corresponding letters)

- 1. Do you **currently** smoke tobacco or have you smoked tobacco in the last month? No/Yes
- 2. Have you ever had any of the following conditions? No/Yes
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  - a. Asbestosis
- g. Silicosis
- b. Asthma
- h. Pneumothorax (collapsed lung)

<ul><li>c. Chronic bronchitis</li><li>d. Emphysema</li><li>e. Pneumonia</li><li>f. Tuberculosis</li></ul>	<ul><li>i. Lung cancer</li><li>j. Broken ribs</li><li>k. Any chest injuries or surgeries</li><li>l. Any other lung problem that you</li></ul>		
a. Shortness of breath b. Shortness of breath c. Shortness of breath d. Have to stop for bre e. Shortness of breath f. Shortness of breath g. Coughing that produ h. Coughing that wake i. Coughing that occur j. Coughing up blood i k. Wheezing l. Wheezing that interf m. Chest pain when yo	when walking with other people at ath when walking at your own pace when washing or dressing yourself hat interferes with your job aces phlegm (thick sputum) s you early in the morning s mostly when you are lying down in the last month	d or walking up a slight hill or incline t an ordinary pace on level ground se on level ground f	
a. Heart attack b. Stroke c. Angina d. Heart failure e. Swelling in your leg f. Heart arrhythmia (he g. Any other heart prol	the following cardiovascular or he s or feet (not caused by walking) art beating irregularly) slem that you've been told about ny treatment for any of the above i		
a. Frequent pain or tigl b. Pain or tightness in c. Pain or tightness in d. In the past two years e. Heartburn or indiges f. Any other symptoms	the following cardiovascular or heat thress in your chest your chest during physical activity your chest that interferes with your to, have you noticed your heart skipp tion that is not related to eating that you think may be related to he have you <b>ever had</b> any of the follow	r job  pping or missing a beat  neart or circulation problems	
(If you've never used a resp a. Eye irritation b. Skin allergies or rasi c. Anxiety d. General weakness o	irator, check the following space a	and go to question 9):	
9. Would you like to talk about		vith the health care professional reviewing	g it? Yes/No
Patient Signature	PLHCP Signature	Date	
NP/PA/MD S	Signature Date	<u></u>	