I. INTRODUCTION:

The procedures outlined in this plan must be followed for every Health Center activity when respirators must be used to protect employee health. Health Center Policy requires compliance with CT OSHA standards and regulations. These procedures implement requirements set by OSHA regulations. Appendix A covers the use of Powered Air Purifying Respirators (PAPR’s) and NIOSH approved respirators for protection against tuberculosis (TB, TB Respiratory Isolation). Appendix B covers the use of NIOSH approved respirators for protection against air contaminated with harmful concentrations of dusts, mists, fumes, gases and/or vapors (e.g., industrial, fire fighting, and laboratory type activities) in accordance with 29 CFR 1910.134. Appendix C covers the requirements for individuals designated as “First Receivers”. This policy is available on the Office of Research Safety website. Appendix D describes the requirements of 29 CFR 1910.134 Appendix D regarding the voluntary use of respirators.

II. SCOPE:

These procedures apply to the use of respirators by Health Center employees to protect their health. As far as feasible, employee exposure control will be accomplished by following good work practices (e.g., substituting less toxic materials, keeping the quantities of chemicals used small, etc.) and engineering controls (e.g., local exhaust ventilation such as a laboratory hood) so that respirators are not needed. When such controls are not feasible, and as an interim measure while controls are being instituted, respirator use may be required. The use of respirators will be in accordance with applicable OSHA requirements and these procedures. Employees participating in the respiratory protection program do so at no cost to them. The costs associated with this respiratory protection program will be borne by the Health Center for Health Center Employees.

These procedures do NOT apply to the medical use of surgical masks such as those to protect the mouth and nose from a droplet/spray of human blood and other potentially infectious materials in accordance with the UCHC Exposure Control Plan for Bloodborne Pathogens or protect patients/animals from contamination from the provider or researcher. The use of surgical masks for protection of the worker against harmful levels of chemicals or for TB Respiratory Isolation is not permitted by the Health Center or OSHA regulations.

In addition, some employees may express a desire to wear respirators during certain operations where respiratory protection is not required. As a general policy, the Office of Research Safety will review such requests on a case-by-case basis. If the use of respiratory protection in such a case will not jeopardize the health or safety of UCHC employees, a NIOSH approved respirator(s) may be provided to the employee for voluntary use. Such voluntary respirator use is subject to certain requirements of this program. This includes medical evaluation, instructions pertaining to cleaning, maintenance, storage and the need to provide the employee with certain case specified information. Employees who voluntarily wear filtering nuisance [dust masks] devices are not subject to the medical evaluation, cleaning, storage, and maintenance provisions of this program.
III. RESPONSIBILITIES:

The Director, Office of Research Safety (x2723) is responsible for administering the respiratory protection program. Duties of the Director as Respirator Program Administrator include:

- Identifying work areas, processes or tasks that require workers to wear respirators and making appropriate hazard evaluations.
- Selecting respiratory protection options.
- Monitoring respirator use to ensure that respirators are used in accordance with this program and the criteria used in selecting the respirator.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Conducting appropriate qualitative fit testing.
- Maintaining non-medical records required by the program.
- Evaluating the program.
- Updating this written program, as needed.

The UCHC Deputy Fire Chief is responsible for the above Program Administration responsibilities as they apply to UCHC Fire Department Employees, except for TB Respirators. For TB respirators, the UCHC firefighters will be covered by Appendix A and they will be trained as needed and fit tested the same as other UCHC employees. The UCHC Fire Department will obtain and maintain certificates documenting that the air used for their supplied air respirators conforms to breathing air quality standards.

The Medical Director, Employee Health Service (EHS) (x2893) is responsible for ensuring all respirator medical evaluations and examinations are done as required. This includes documentation of medical actions, medical notification to employees in accordance with 29 CFR 1910.134 for industrial/general industry respirators. When other physicians are associated with the medical evaluation process, Employee Health Service will coordinate all actions. Employee Health Service will also respond promptly to any concerns raised by employees on the respiratory protection program, as applicable. They will maintain required medical records and recall employees at the prescribed frequencies. Such medical evaluations will be provided during the employee’s normal work hours or at a time and place convenient to the employee.

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by their employees. Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and annual medical evaluations as required to comply with the OSHA Respirator Standard.
- Ensuring the availability of appropriate quantity, size and model respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection (e.g., not allowing respirator use when facial hair would interfere with a tight fitting negative pressure respirator).
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
• Ensuring that respirators fit well and do not cause discomfort.
• Continually monitoring work areas and operations to identify potential respiratory hazards that need to be evaluated in accordance with this program.
• Coordinating with the Office of Research Safety on how to address new or changed respiratory hazards or other concerns regarding the program.

Facilities Management, Environmental Control Center has the responsibility for maintaining Powered Air Purifying Respirators (PAPRs) for delivery to the Emergency Department during a hazmat response and making them readily available should the need arise. These respirators are also used by Facilities Staff to enter areas that are not IDLH. Typical use would be to deliver a portable HEPA filter unit to a TB isolation room. Facilities management must ensure that all possible users are trained annually by the Office of Research Safety.

The employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

• Use their respirator for only the tasks it was selected for.
• Care for and maintain their respirators as instructed, and store them in a clean sanitary location.
• Don and wear their respirator as they were trained.
• Inform their supervisor if the respirator no longer fits well and request initiation of new fit testing so that a new respirator model/size that fits properly can be selected and issued.
• Inform their supervisor, the Office of Research Safety (x2723) or Employee Health Service of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
• For Industrial/General Industry Respirators, change canisters or cartridges of air purifying respirators as instructed/trained during the fit testing/training session.
• Not enter an area designated as requiring respiratory protection without donning NIOSH approved respirators with concomitant medical clearance, fit testing and training.
• If necessary, comply with annual fit testing, training and medical evaluation requirements.

IV. RESPIRATOR SELECTION:

When a worker must wear a respirator for protection against a possible airborne hazard the type will be specified by the Office of Research Safety after evaluating the conditions of use and the hazard(s) to which the worker may be exposed. These procedures also apply to the use of respirators for radiation protection. Only respirators approved by NIOSH (National Institute of Occupational Health and Safety) shall be used. The type of respirator selected must fit the individual and be suitable for the hazard (e.g., chemical, the anticipated chemical concentrations and/or airborne hazard, presence of oil mist, TB, etc). Other factors that will be considered will be: comfort, user acceptance, toxicity, warning properties and physical state of the chemical (gas/vapor, particulate, etc.). PAPR’s are the method of choice for protection against airborne biological pathogens such as tuberculosis.

For UCHC Firefighters, when circumstances result in potential exposure to unknown toxic chemicals or potentially hazardous chemicals concentrations that are unknown, the environment will be considered immediately dangerous to life and health (IDLH) and only self-contained breathing apparatus (SCBA) operated in a positive pressure mode will be used. The
senior UCHC Firefighter will also make sure that for UCHC employees other CT OSHA regulations are complied with and these include (but are not limited to) HAZWOPER (29 CFR 1910.120), Confined Space (.146), Bloodborne Pathogens (.1030), etc. After evaluation and if specifically agreed to by both the Office of Research Safety and the senior UCHC Firefighter, other types of respirators may on a case by case basis be used provided all other parts of the UCHC respirator program (training, medical evaluations, qualitative fit testing) have been satisfied.

Selection procedures used by the Office of Research Safety will include as appropriate:

1. Identification and evaluation of the hazardous substances used in the workplace or work process for which respiratory protection is being considered.

2. Consideration of other exposure factors (skin absorption, eyes, etc.) and other exposure control recommendations (including use of engineering controls, process changes, need for other types of personal protective equipment (PPE) in accordance with the UCHC PPE Policy, etc.).

3. Exposure monitoring or assessment, as applicable, to quantify potential hazardous exposures based on established occupational exposure standards and materials. Respirator will not be issued when monitoring data suggest elevated levels above the IDLH of the compound and/or an oxygen deficient environment (<19.5% oxygen).

4. Consideration of information on end of service life indicators and/or information on cartridge/canister service life.

V. RESPIRATOR FITTING AND TRAINING:

Once the type of respirator has been specified by the Office of Research Safety, the employee will select and be fitted with a style and size that is as comfortable as possible (a snug fit is necessary for negative pressure air purifying respirators). The employee will be able to select an air purifying respirator from at least two models or sizes.

For industrial/general industry respirators, the medical evaluation will be completed prior to the fit test. After medical approval to wear the industrial/general industry respirator has been given by Employee Health Service, the qualitative fit test will be performed by an Office of Research Safety representative (or an individual approved by the ORS) using a protocol referenced in 29 CFR 1910.134.

PAPR’s for TB protection will also require an abbreviated medical evaluation prior use and supplied by the Office of Research Safety. N-95 respirators may also be used and must be NIOSH approved HEPA or N95 respirators and medical clearance and fit testing are required annually.

Voluntarily Issued Respirators will be provided when requested by the employee or recommended for use by the Employee Health Service, the Office of Research Safety or an individual supervising an employee. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. This category of respirator will be issued in instances where there is potential exposure to animal dander/hair, dusts or used when adequate engineering controls are in place to control a hazard and worker exposure is less than the PEL. This category of respirator shall not be used in the workplace where protection from an air contaminate is needed to keep exposures less
than the appropriate PEL. Medical clearance, fit testing and training on the use of such respirators will be done initially and yearly follow up encouraged. It is the responsibility of the wearer to initiate retraining, annual medical clearance and annual fit testing.

As part of the selection and fit testing of a voluntary respirator, the employee will be provided necessary training on correct donning, adjustments, applicable pressure tests to be made by the user prior to every use, limitations of the respirator, maintenance and storage requirements, etc. For cartridge/canister respirators, instructions will also be given on change frequency and this will be included on the fit test form. The Office of Research Safety will periodically (reference as appropriate 29 CFR 1910.134 or .139) and at the request of a Department Head, P.I. or employee conduct annual refresher classes on respirator use.

**PAPR’s for FIRST RECEIVERS** are maintained in the Emergency Department, the Environmental Control Center, both of which operate 24/7. PAPR’s are also available in a very limited number in the Office of Research Safety.

If the respirator to be used does not require a tight fit (PAPRs), fit testing is not required (fit testing is required for tight fitting supplied air respirators even when only operated in a positive pressure mode). However, individuals using PAPRs are required to have proper training prior to use. Individuals in the Emergency Department and the Environmental Control Center who may be called upon to don a PAPR are trained yearly. Others (ie: those who failed a conventional respirator fit test) are trained during fit testing or are trained as needed. See Appendix C for FIRST RECEIVER requirements.

**VI. MEDICAL EVALUATIONS:**

ALL Respirators will be used ONLY by employees who are physically able to do so as determined by the Medical Director, Health Center's Employee Health Service (EHS). The Medical Director may designate qualified individuals for such determinations.

When it has been determined that an employee must be required to wear an industrial/general industry negative pressure respirator for protection against chemical overexposure or for protection from other airborne hazards, the supervisor will contact the Office of Research Safety (ORS), x2723. The ORS will evaluate the potential hazard(s) and controls. The ORS will then specify the basic type of respirator to be utilized. The ORS may restrict such respirator use to an interim period while changes in procedures or engineering controls are being instituted. The supervisor will then schedule the employee to (report to) Employee Health Service with the respirator user form that has been partially completed by the ORS. That partially completed form will provide Employee Health Service with the information required by 29 CFR 1910.134 (see Appendix B). Employee Health Service will medically evaluate and determine the physical ability of the employee to use any respirator and/or the type respirator selected. Employee Health Service will then notify in writing the employee, the supervisor and the ORS of their conclusion. The supervisor will then schedule the individual for fit testing with the ORS. Until an approved medical qualification is received from EHS and the fit testing has been completed by ORS, the employee(s) will not perform tasks requiring the use of a respirator to prevent exposure. Alternative procedures may be implemented to provide for more efficient processes to complete training, medical evaluation and fit testing. The Office of Research Safety will not fit test any individual without a prior medical clearance. See Appendix B for initial and annual medical clearance forms for use of industrial respirators.

Employee Health Service (EHS) will reevaluate at least annually employees who have a continued need to perform tasks where a respirator is required. If upon reevaluation or
because of an EHS consultation visit, the employee is determined by EHS not to be physically able to use a respirator, the employee, Office of Research Safety and supervisor will be notified in writing by EHS. Alternative measures may be taken to ensure sufficient protection in lieu of a negative pressure respirator such as using a PAPR or changing work duties. The frequency and content of the medical qualification procedures will be based on the medical judgment of Medical Director, EHS. For tight fitting Industrial/General Industry Respirators, the medical evaluations will be in accordance with 29 CFR 1910.134 and done at least yearly, except as exempted for voluntary use (Appendix D) or as specified for TB respirators (Appendix A).

VII. EMERGENCY SITUATIONS:

For chemical exposure control in emergencies when concentrations are unknown and/or may be immediately dangerous to life and health, such as in a significant chemical spill, only trained fire department personnel with self contained breathing apparatus operated in a positive pressure mode shall enter the area. An appropriate restricted area shall be established by the Fire Department Incident Commander and others will be restricted from entry into the restricted area. Personnel discovering such an emergency will alert others to leave the room, close the door, and dial "7777" for emergency response by the UCHC Fire Department. As the situation is evaluated by the Fire Department Incident Commander in coordination, as appropriate, with the user of the area and the Office of Research Safety, additional occupational exposure evaluations will be made to determine additional actions or assistance needed.

VIII. OTHER GENERAL REQUIREMENTS:

1. **Face Seal**: Respirators relying on negative pressure for protection shall **NOT** be worn in atmospheres which would result in a chemical or TB exposure when conditions prevent a good facepiece to face seal. Such conditions might be a growth of beard, sideburns, skull cap, temple pieces of glasses that break the seal of a tight fitting facepiece, etc.

2. **Corrective Lenses**: If corrective lenses or goggles are required, they will be worn so as not to affect the fit of the facepiece. Contact lenses may be worn with respirators; as appropriate for the anticipated exposure, suitable eye protection will be worn.

3. **Eye/Face Protection**: With half-mask respirators, eye protection may also be required. Thus, for fitting of respirators used for chemical protection the worker should bring to the Office of Research Safety any corrective glasses and/or chemical safety goggles that would need to be worn.

4. **Skin Absorption**: Skin absorption for some chemicals may also be a significant exposure route. Even when a respirator is used, prudent industrial and laboratory practices dictates that skin contact be avoided. The Office of Research Safety has information on the protection afforded by various gloves and disposable clothing materials.

5. **Emergency Use Respirators**: Respirators which are issued to the individual employee and kept as new stock for issue to the employee as a personal respirator, are not covered by this paragraph. Other respirators that are not routinely used, but are kept ready for emergencies are considered emergency use respirators. These include all Fire Department supplied air respirators. Supervisors are responsible for maintaining an inspection program for emergency respirators that includes having the respirator(s)
inspected after each use and at least monthly to assure that they are in satisfactory condition. A written record of such inspection dates and findings must be kept by the supervisor. SEE ALSO SECTION VII ON EMERGENCY SITUATIONS. Supervisors of functions that have or are planning on having respirators for emergency use shall notify the Office of Research Safety (x2723).

6. **Oxygen Deficiency Atmosphere:** Atmosphere supplying respirators must be used in oxygen-deficient atmospheres (where oxygen is less that 19.5%). Typically, such environments also are covered by the UCHC Permit Required Confined Space Policy. If the atmosphere may contain less than 16% oxygen, a full facepiece pressure demand self-contained breathing apparatus or full facepiece pressure demand airline respirator with auxiliary self-contained air supply shall be used. Only properly trained emergency fire personnel shall don such respirators.

7. **Maintenance of Respirators:** Respirator maintenance will be limited to procedures conducted in accordance with manufacturer instructions with any parts being identical in make and size specified by the original manufacturer for the specific respirator.

IX. **AIR SUPPLIED RESPIRATORS OF THE UCHC FIRE DEPARTMENT:**

The above procedures are generally applicable to air supplied respirators. However, many other OSHA requirements may have to be considered for supplied air respirators. Thus, except for the UCHC Fire Department, any department or supervisor planning to use an air supplied respirator must contact the Office of Research Safety for a respirator safety assessment. The Office of Research Safety will review the hazard(s) and provide specific use and training recommendations to the department. These specific recommendations must be complied with and will form for that department an addendum to these procedures.

The UCHC Fire Department will establish their own written procedures for their respirator training, fit testing, respirator inspections, supervisor program reviews and use of self-contained breathing apparatus consistent with OSHA requirements. Their medical qualification to use a respirator will be from EHS. Their SCBA respirators are for emergency use and written records will be kept of at least monthly inspections of each such respirator. The Fire Department will maintain documentation that demonstrates the compressed air used meets breathing air quality standards. They will coordinate the use of any air-purifying industrial respirators (see Appendix A and B) in advance with the Office of Research Safety.

X. **STUDENTS:**

The above guidelines will generally apply to students, except those voluntarily wearing a respirator in an atmosphere known to be below established occupational health limits (e.g. formaldehyde exposures in anatomy laboratory).

XI. **CHANGES:**

Recommendations for changes to these procedures should be addressed to the Office of Research Safety (MC-3930, x2723).
XII. **ENFORCEMENT:**

Failure to comply with these requirements may result in disciplinary action up to and including termination of employment.

XIII. **APPENDIXES:**

- Appendix A: Selection of Use of Positive Air Purifying Respirator for Protection Against Tuberculosis Exposure
- Appendix B: Industrial/General Industry Use of Respirator
- Appendix C: PAPR Use for First Receivers
- Appendix D: Mandatory Information for Employees Using Respirators When Not Required Under the Standards

**RECOMMEND APPROVAL:**

Kenneth W. Price, MPH, CHP  
Executive Director  
Environmental Health and Safety Programs

Oluremi Aliyu, MD, MPH, Medical Director  
Occupational/Environmental Medicine
APPENDIX A

SELECTION AND USE OF POSITIVE AIR PURIFYING RESPIRATOR FOR PROTECTION AGAINST TUBERCULOSIS EXPOSURE

(5/12)

I. INTRODUCTION:

This Appendix provides summarized details of the University of Connecticut Health Center’s program for the selection, fit testing and issuing of respirators for protection against exposure to tuberculosis. A formal policy exists separate from this document entitled “University of Connecticut Health Center Policy for Control of Health Care Worker Exposure to Airborne Pathological Contaminants Such as Tuberculosis Bacillus and Pandemic Flu Virus”. This policy is based on recommendations from the Centers for Disease Control. Following CDC recommendations, it has been determined that the UCHC is a low risk facility based on CDC criteria of fewer than 6 cases per year. As a result of this risk analysis, certain target groups have been identified as staff with potential for exposure to TB. These target groups are as follows:

- Anatomic Pathology (Autopsy only)
- Cardio/Pulmonary Service
- Center for Laboratory Animal Care (At risk Staff)
- Correctional Managed Health Care
- Diagnostic Radiology
- Emergency Department
- Facilities Management (EOC)
- Geriatric Psych 3
- Housekeeping (Supervisors only)
- Intensive Care Unit
- Infectious Disease Clinic
- Laboratory Medicine (Phlebotomists)
  - Med 4
  - Oncology 6
  - Permanent Float Pool
  - Psych 1
  - Surg 5
  - Surg 7
  - Respiratory
  - Transportation Aides

Managers in these groups are responsible for ensuring potentially exposed individuals are compliant with the TB Policy. Entry into a TB isolation room or an area performing research with infectious TB is prohibited unless an individual is properly trained, medically cleared and is wearing a NIOSH approved Powered Air Purifying Respirator (PAPR) or N-95 negative pressure respirator.

II. SELECTION OF RESPIRATORY PROTECTION

The Occupational Safety and Health Administration withdrew the TB standard on Occupational Exposure to Tuberculosis (29CFR 1910.139) on December 31, 2003. As a result of this action, medical facilities wishing to issue respirators to staff for control of potential exposure to TB had to comply with the General Industry Respiratory Protection Standard (29 CFR 1910.134). Ramifications of this revocation were significant, including eliminating the use of irritant smoke for fit testing, annual retraining, annual medical clearance and annual refitting of respirators.
Congressional action followed and on December 22, 2004, Congress passed the Consolidated Appropriations Act (FY 2005 budget bill) that forbid OSHA from utilizing any of its funding to enforce the annual fit testing requirements. Because there was a considerable period from the withdrawal of the TB standard in the action taken on December 22, 2004, many of the requirements in the Respirator Standard were applied to the UCHC TB Control Program.

All respirators must be NIOSH certified PAPR’s or N95 HEPA masks. Fit testing for N-95 respirators is done using the Bitrex procedure as provided in the OSHA Respirator Standard. Other OSHA approved procedures may be used if necessary.

The use of PAPR’s is the first choice for respiratory protection. PAPR’s must be NIOSH approved and individuals trained in their use. As an alternative, N-95 masks may be used provided annual medical clearance, training and fit testing are done. It is the primary responsibility of the N-95 wearer to obtain the annual fit-testing and medical clearance.

Information concerning types of respirators, fit testing and training may be obtained from the Office of Research Safety (x2723) or the Department of Epidemiology, Infection Control (x4376).

III. PROCEDURE FOR OBTAINING A PAPR - TUBERCULOSIS

Upon discovery of a potentially active TB patient you must:

1. Provide the patient a surgical mask/tissue to cover their mouth while coughing.
2. Notify your supervisor.
3. Place patient in a negative pressure room, post “Airborne Precautions” sign. If a negative pressure room is not available, call the Environmental Control Center (x2338) for delivery of a HEPA air cleaning unit.
4. Call Transportation (x1948) have the PAPR cart delivered.
5. Do not enter room without first putting on a PAPR/Hood unit.
6. Complete abbreviated medical questionnaire prior to wearing a PAPR. If the answer to any question is “yes”, you cannot enter the room.

Detailed information may be found in the “University of Connecticut Health Center Policy for Control of Health Care Worker Exposure to Airborne Pathological Contaminants Such as Tuberculosis Bacillus and Pandemic Flu Virus”.

IV. ANNUAL RESPIRATOR FIT TESTING/MEDICAL CLEARANCE / N-95 USE RECERTIFICATION

If wearing an N-95 respirator initial and annual medical clearance, training and fit testing is required.

It is the staff members responsibility to obtain annual medical clearance training, fit testing and annual recertification is needed.

1. Contact Office of Research Safety at x2723. Request a “Periodic Respirator Questionnaire after Initial Medical Clearance” form. This form is attached in Appendix B.
2. Complete the form and if all answers are “no” schedule an appointment with the Office of Research Safety. Bring the form with you. Any “yes” answer requires that you MAIL the form to the Employee Health Service, Dr. Oluremi Aliyu, MC6210. You cannot be
refitted until the Employee Health Service forwards a medical clearance to the Office of Research Safety.
3. Report with your respirator for a refit after medical clearance is obtained.
4. Refresher training will be provided during the fit test.

V. PAPR MAINTENANCE / SANITZATION

The Office of Research Safety maintains, inspects, restocks and sanitizes all PAPR units. This is documented using a checklist. The PAPR cart is stored in the Office of Research Safety (BG-003) and is delivered by the hospital’s Transportation Department.

VI. CONTACTS

The Departments below can be contacted for information.

Department of Epidemiology x4376
Employee Health Service x2893
Environmental Control Center x2338
Office of Research Safety x2723

Appendix A-Attachments

Positive Air Purifying Respirator (PAPR) Medical Evaluation Questionnaire
TB Respiratory Isolation (RI) Respiratory Training and Fit-Test Protocol
Positive Air Purifying
Respirator (PAPR) Medical Evaluation Questionnaire

Please complete this questionnaire prior to wearing a PAPR except during patient emergencies. If you have medical questions call Employee Health Service at 679-2893. For questions regarding PAPR operation, etc., call the Office of Research Safety at 679-2723.

If your responses are “No”, place this completed form in the folder provided on the PAPR Cart and you are approved to use a PAPR.

If you answer “yes” to any question, contact Sandra Barnosky, APRN, Employee Health Service (679-3744), or Dr. Oluremi Aliyu (679-2893 or 679-4564) and retain or destroy this form. If the answer to any question is “yes” you may not wear a PAPR unit and entry into a respiratory isolation area is prohibited.

Please answer the following questions.

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<th></th>
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| Your name (please print): |  |

| 1. Have you had any problems wearing a PAPR or N95 respirator? | Yes  No |
| 2. Do you have poorly-controlled asthma? | Yes  No |
| 3. Did you have COPD (Chronic Obstructive Pulmonary Disease)? | Yes  No |
| 4. Did you have claustrophobia (fear of closed-in places)? | Yes  No |
| 5. Do you have undiagnosed chest pain? | Yes  No |
| 6. Do you have any medical or other condition that you would like to discuss with a health care provider? | Yes  No |

Signed: ___________________________ Date: ________________

Approvals:

[Signature]
Oluremi Aliyu, MD, MPH
Medical Director, Occupational/Environmental Medicine

[Signature]
Kenneth W. Price
Date 5/27/10
Director, Office of Research Safety
TB Respiratory Isolation (RI)  
Respiratory Training and Fit-Test Protocol

Check if:  
☐ Employee  ☐ Resident  ☐ Student

<table>
<thead>
<tr>
<th>Social Security Number</th>
<th>Department</th>
<th>Mail Code</th>
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Last Name

First Name and Middle Initial (leave a space between first name and middle initial)

1. Respirator Training Completed:  ☐ YES  ☐ NO
2. Date of Qualitative Fit Test:  __________

3. Test Conductor:  ☐ Ken Price  ☐ Steve Jacobs  ☐ Patti Wawzniecki  ☐ Nancy Dupont  Other: ______________________

4. Test Agent:  ☐ Bitrex  ☐ Saccharin  ☐ Other  Number of squeezes for taste:  ☐ 10  ☐ 20  ☐ 30

5. Was Sensitivity Verified?  ☐ YES  ☐ NO

6. Respirator:
   a. 3M1870 N95  ☐ Regular
   b. 3M1860/1860S N-95 (TC-84A-006)  ☐ Regular
   c. Tecnol 46767  ☐ Regular
   d. 3M6000 with 2040 HEPA Filters (TC-21C-548)  ☐ Small (6140)  ☐ Medium (6240)  ☐ Large (6340)
   e. Other Manufacturer _________  Model _____  Size ___  Approval # ____  Reason __________________

7. Employee informed that a refit of a respirator is required annually or as indicated (Environmental Health and Safety x2723) in case of: significant weight change (>20 lb.), significant facial scarring in area of the facepiece seal, significant dental changes, reconstructive or cosmetic facial surgery, or any other condition that would interfere with the respirator seal.  ☐ YES  ☐ NO

8. No respirator was selected due to:  ☐ Facial Hair  ☐ Referred to EHS  ☐ Other
   ______________________

Employee Signature:  ____________________  Date: ____________________

EHS TB Respirator Approval:  ____________________  Entered By: ____________________  Date: ____________________
INDUSTRIAL/GENERAL INDUSTRY USE OF RESPIRATORS

I. PURPOSE:

A. To assure worker safety through proper use of industrial/general industry respirators and compliance with 29 CFR 1910.134

**WARNING:** This instruction emphasizes that respirator use to prevent an employee from being overexposed to a chemical always requires strict compliance with the Health Center's Written Respirator Program. This program requires that:

1. As far as feasible, employee exposure control will be accomplished by following good work practices (e.g., keeping quantities of chemicals used small and/or substitution of less toxic products) and engineering controls (e.g., local exhaust ventilation such as a laboratory hood, dilution ventilation, etc.) prior to reliance on the use of a respirator to prevent chemical overexposure;

2. The respirator type be selected by the Office of Research Safety, based on an evaluation of the work that will be performed and the chemicals that represent an exposure concern;

3. The employee complete respiratory training given by the Office of Research Safety and pass any necessary fit test conducted by the EHSO with the type of respirator selected, (no facial hair can be allowed under a tight fitting respirator's sealing surfaces); and

4. The employee be medically qualified to use a respirator by Employee Health Service prior to use of the respirator and then at least yearly.

B. This instruction also recognizes that at times workers use surgical type masks as required by universal precautions (Bloodborne Pathogen Policy) and request dust respirators for added comfort during certain tasks when a job would clearly not result in an overexposure to dust without the respirator. Use of a surgical mask as part of universal precautions or to protect the patient from the employee does not trigger the actions outlined in the warning above. For exposures to nuisance dust in very limited situations where the employee would not be overexposed without use of the respirator, this instruction outlines the procedures the first-line supervisor of the employee must follow to authorize the issue of a disposable particulate respirator for those not on the formal respirator program. Details regarding voluntary use of respirators is provided in Appendix D.
II. PROCEDURE:

A. The UCHC Fire Department, as authorized and outlined in the Health Center’s Written Respirator Program administers under the Deputy Fire Chief their own respirator program in strict accordance with 29 CFR 1910.134.

B. In accordance with the Health Center's Written Respirator Program employees needing respiratory protection for exposure to a gas, vapor, toxic dust or toxic fume (smoke from solder, welding, etc.) to prevent overexposure will complete all respirator training, fit testing and medical requirements and use only a respirator selected by the Office of Research Safety for the covered task(s). Supervisors will coordinate all such issues with the Office of Research Safety.

C. Employees required to wear a respirator as described in IIB will be on the formal respirator program described in the Health Center’s Written Respirator Program and this Appendix. They will complete respirator training and fit testing provided by the Office of Research Safety. Fit test procedures will comply with 29 CFR 1910.134 established protocols. Such employees will be medically qualified (prior to fit testing and yearly) by Employee Health Service. The supervisor of such employees is responsible for having such employees comply with these requirements. The supervisor will also provide the specific model and size respirator and identical replacement parts, as necessary, to the employee(s) at no cost to the employee.

D. Supervisors in Facilities Management of personnel not on the formal respirator program required by paragraphs II.B. and II.C. may, on a limited and a case-by-case basis, authorize the issue of a particulate (e.g., dust) NIOSH respirator for comfort for the tasks listed below when it is clear that only nuisance dust (particles) is of concern and that an overexposure would not occur without use of a respirator. Supervisors shall carefully consider any employee request for use of such a particulate respirator in accordance with these instructions. If jobs are dirty enough to require a respirator for comfort, they may need to be evaluated by the supervisor and/or the Office of Research Safety. If in doubt, the supervisor will consult with the Office of Research Safety (x2723). Tasks where a respirator might be used for comfort (vs, for the prevention of overexposure) include:

- Spreading top soil, mulch, etc.
- Electrical work near fibrous glass insulation
- Changing of ventilation system pre-filters or plenum clean outs.
- Routine housekeeping tasks such as dust mopping/cleaning of normal household type dusts
- Universal Precautions, in lieu of a surgical mask for direct interception of a liquid splash/droplets to the mouth (eye protection would also be needed)
- Exposure to animal dander, nuisance odors, etc.

The supervisor must understand and make sure that the employee using the respirator in accordance with this paragraph (II.D.) is given a copy of Appendix D and understands that:
1. Even such low level dust may be more than a nuisance for the sensitized individual or an individual with a medical condition. Thus, in case of complaints from such dusts the work will be stopped and the employee referred to Employee Health Service for any medical problems. The Office of Research Safety will also be contacted by the supervisor and a joint survey made of the area prior to resumption of the activity;

2. Respirators issued under this paragraph II.D. are issued to the individual, will be marked with the individual's name, will be kept clean by the individual and discarded into the trash at the end of the day or activity, whichever occurs first; and

Respirators for nuisance dust used by employees not on the full respirator program of the Health Center will be used only for activities specifically approved by the supervisor in accordance with this paragraph. **CAUTION: A PARTICULATE (DUST) RESPIRATOR PROVIDES ONLY LIMITED PROTECTION AGAINST DUST. PARTICULATE RESPIRATORS PROVIDE NO PROTECTION AGAINST SOLVENT VAPORS (PAINT VAPORS, VAPORS FROM CLEANING COMPOUNDS, ETC.) OR GASES. SUCH AIR PURIFYING RESPIRATORS ALSO PROVIDE NO PROTECTION AGAINST OXYGEN DEFICIENCY OR SKIN ABSORPTION OF CERTAIN CHEMICALS. SUPERVISORS ARE NOT AUTHORIZED TO APPROVE IN ACCORDANCE WITH PARAGRAPH IID, THE USE OF A RESPIRATOR FOR TASKS OR SITUATIONS LISTED BELOW:**

- WORK IN A CONFINED SPACE (A PERMIT IN ADVANCE MUST BE OBTAINED FROM THE OFFICE OF RESEARCH SAFETY - SEE HEALTH CENTER'S CONFINED SPACE POLICY. IN AN EMERGENCY AND ON WEEKENDS, AND AFTER HOURS, CONTACT THE UCHC FIRE DEPARTMENT FOR THE PERMIT).

- A CHEMICAL SPILL CLEANUP

- PROTECTION AGAINST A TOXIC DUST

- PROTECTION AGAINST ANY VAPOR/GAS

- WHEN FACILITIES MANAGEMENT OR THIS APPENDIX OTHERWISE MANDATES RESPIRATOR USE

- PROTECTION AGAINST WELDING, SOLDERING FUMES

- EMPLOYEE WITH A QUESTIONABLE HEALTH STATUS

- EXPOSURE TO A POTENTIALLY INFECTIOUS TB PATIENT

ANY OF THE ABOVE TASKS/CIRCUMSTANCES WILL TRIGGER PROMPT COORDINATION WITH THE OFFICE OF RESEARCH SAFETY AND SUCCESSFUL COMPLETION OF ALL RESPIRATOR PROGRAM REQUIREMENTS (RESPIRATOR SELECTION, TRAINING, FIT TESTING, MEDICAL QUALIFICATION) PRIOR TO SUCH A TASK OR THE WEARING OF ANY RESPIRATOR.
E. The following forms shall be used, or revisions of it made by the Office of Research Safety, when issuing an Industrial/General Industry respirator. Once the Office of Research Safety determines an individual requires an Industrial/General Industry respirator, Section I of the form will be completed by the Office of Research Safety and forwarded to the Employee Health Service. The Employee Health Service will then complete Section II of the form and forward back to the Office of Research Safety. The fit test and training is then completed as indicated in Section III of the form. All respirator fit test and training information is entered into a database that is maintained by the Office of Research Safety. An initial medical evaluation form is attached as well as a yearly follow-up medical questionnaire.

F. Powered Air Purifying Respirators (PAPR) may be required in instances where an individual could not be fitted with a conventional respirator. The “Industrial/General Industry Respirator User Form” will be used for assigning individuals PAPR units for situations other than exposure to infectious airborne pathogens (See TB Policy Appendix A). An abbreviated medical clearance is required. PAPRs are available by contacting the Office of Research Safety (x2723). Prior to issuing a PAPR to an individual the Office of Research Safety must approve and develop procedures for maintaining the unit and follow up training.

Attachments:

Industrial/General Industry Respirator User Form
Respirator Medical Evaluation Questionnaire
Periodic Respirator Questionnaire After Initial Medical Clearance and Fit Testing
Annual Requirements
**INDUSTRIAL/GENERAL**

**INDUSTRY RESPIRATOR USER FORM**

---

### I. FROM: Environmental Health & Safety

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name and Middle Initial</th>
<th>(Leave a space between first name and middle initial)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supervisor’s Name</th>
<th>Ext.</th>
<th>Mail Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User’s Department</th>
<th>Ext.</th>
<th>Mail Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nature of Hazard:** (completed by EHSO)

---

**Duration and Frequency of Use:**

**Respirator Use Location:**

**Respirator Storage Location:**

**A. Type Respirator Specified by EHSO:** (Check)

<table>
<thead>
<tr>
<th>Disposable Particulate (Circle N-95, N-100, HEPA)</th>
<th>less than 4 oz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half Mask Air Purifying (Filter or Cartridge)</td>
<td>4 - 8 oz</td>
</tr>
<tr>
<td>Full Face Mask, Air Purifying (Filter or cartridge)</td>
<td>1.5 – 2.0 lbs</td>
</tr>
<tr>
<td>Powered Air Purifying</td>
<td>5 lbs</td>
</tr>
<tr>
<td>Air Supplied:</td>
<td></td>
</tr>
<tr>
<td>Airline Respiator</td>
<td>8 - 15 lbs</td>
</tr>
<tr>
<td>Self Contained Breathing Apparatus</td>
<td>15 - 25 lbs</td>
</tr>
</tbody>
</table>

**C. Level of Temperature/Humidity During Use:**

<table>
<thead>
<tr>
<th>Attic (High temp/humidity)</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside Condition Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside (Winter/Summer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steam (High temp/humidity)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**D. Other Comments:**

---

### II. TO: Employee Health Services

Please provide your determination in writing to the Environmental Health and Safety Office (MC3930), supervisor and the employee. A copy of the 
UCHC Respirator Program is in the Shared e-mail folder “SAFETY”.

**EHS APPROVAL:** YES ___ NO ___

Initials ______  Date _________

---

### III. TO: Environmental Health & Safety

1. **Type of Respirator Selected:** ____________________  2. **Finally Selected Model:** __________ Size __________

3. **Atmosphere Test Used for Finally Selected Model:**

<table>
<thead>
<tr>
<th>a. Isoamyl Acetate</th>
<th>b. Bitrex</th>
<th>c. Saccharin</th>
<th>d. Irritant Smoke (No Hood)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>Fail</td>
<td>Fail</td>
<td>Fail</td>
<td>Fail</td>
</tr>
</tbody>
</table>

   **If saccharin/Bitrex, # of squeezes for sensitivity:** __________

   **Did worker detect test atmosphere?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

4. **Trained on:**

<table>
<thead>
<tr>
<th>a. Limitations</th>
<th>b. Donning</th>
<th>c. Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Prior to Use Checks</td>
<td>e. Maintenance</td>
<td>f. Storage</td>
</tr>
<tr>
<td>g. Marking with Name</td>
<td>h. Changing Filters/Respirators</td>
<td>i. Eye Protection</td>
</tr>
<tr>
<td>j. Facepiece to Face Problems</td>
<td>k. Respirator Removal During Work</td>
<td>l. Given Appendix D</td>
</tr>
</tbody>
</table>

5. **Is this a cartridge/canister respirator?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

   **If YES, change frequency:** ____________________

6. **Date Completed Fit Testing/Training:** ______/______/______

7. **If individual did not complete fit test, reason:**

<table>
<thead>
<tr>
<th>a. Facial Hair Interference</th>
<th>b. Other: ____________________</th>
</tr>
</thead>
</table>

---

**Employee Signature:** __________________________________________________________

**Date:** ______________________

**EHSO Representative Signature:** _______________________________________________

**Date:** ______________________
Respirator Medical Evaluation Questionnaire

Please complete the Sections of this questionnaire that apply to you. If you have medical questions call Employee Health Service at 679-2893. For questions regarding respirator fit test appointments, call the Office of Research Safety at x2723.

TO THE EMPLOYEE:

Can you read (circle one): Yes No

Respirator Category (circle one): Required Voluntary

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. Return this questionnaire to Dr. Dr. Oluremi Aliyu, Medical Director, Employee Health Service, MC6210. DO NOT FAX.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date:____________________________

2. Your name:_________________________________________________ SSN: _______ - ____ - _______

3. Your date of birth:______________________________

4. Sex (circle one): Male/Female

5. Your height: __________ ft. __________ in.

6. Your weight: ____________ lbs.

7. Your job title:____________________________________ Department/Work Area: _____________________

   Have you contacted the Office of Research Safety about Respiratory Requests (circle one): Yes No

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):____________________________________

9. The best time to phone you at this number: ________________

10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes No

11. Check the type of respirator you will use (you can check more than one category):
   a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
   b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

12. Have you worn a respirator (circle one): Yes No

If "yes," what type(s):____________________________________

______________________________

______________________________
Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you **currently** smoke tobacco, or have you smoked tobacco in the last month: Yes/No

2. Have you **ever had** any of the following conditions?
   a. Seizures (fits): Yes/No
   b. Diabetes (sugar disease): Yes/No
   c. Allergic reactions that interfere with your breathing: Yes/No
   d. Claustrophobia (fear of closed-in places): Yes/No
   e. Trouble smelling odors: Yes/No

3. Have you **ever had** any of the following pulmonary or lung problems?
   a. Asbestosis: Yes/No
   b. Asthma: Yes/No
   c. Chronic bronchitis: Yes/No
   d. Emphysema: Yes/No
   e. Pneumonia: Yes/No
   f. Tuberculosis: Yes/No
   g. Silicosis: Yes/No
   h. Pneumothorax (collapsed lung): Yes/No
   i. Lung cancer: Yes/No
   j. Broken ribs: Yes/No
   k. Any chest injuries or surgeries: Yes/No
   l. Any other lung problem that you’ve been told about: Yes/No

4. Do you **currently** have any of the following symptoms of pulmonary or lung illness?
   a. Shortness of breath: Yes/No
   b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
   c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
   d. Have to stop for breath when walking at your own pace on level ground: Yes/No
   e. Shortness of breath when washing or dressing yourself: Yes/No
   f. Shortness of breath that interferes with your job: Yes/No
   g. Coughing that produces phlegm (thick sputum): Yes/No
   h. Coughing that wakes you early in the morning: Yes/No
i. Coughing that occurs mostly when you are lying down: Yes/No
j. Coughing up blood in the last month: Yes/No
k. Wheezing: Yes/No
l. Wheezing that interferes with your job: Yes/No
m. Chest pain when you breathe deeply: Yes/No
n. Any other symptoms that you think may be related to lung problems: Yes/No

5. Have you ever had any of the following cardiovascular or heart problems?
   a. Heart attack: Yes/No
   b. Stroke: Yes/No
   c. Angina: Yes/No
   d. Heart failure: Yes/No
   e. Swelling in your legs or feet (not caused by walking): Yes/No
   f. Heart arrhythmia (heart beating irregularly): Yes/No
   g. High blood pressure: Yes/No
   h. Any other heart problem that you've been told about: Yes/No

6. Have you ever had any of the following cardiovascular or heart symptoms?
   a. Frequent pain or tightness in your chest: Yes/No
   b. Pain or tightness in your chest during physical activity: Yes/No
   c. Pain or tightness in your chest that interferes with your job: Yes/No
   d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
   e. Heartburn or indigestion that is not related to eating: Yes/No
   f. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you currently take medication for any of the following problems?
   a. Breathing or lung problems: Yes/No
   b. Heart trouble: Yes/No
   c. Blood pressure: Yes/No
   d. Seizures (fits): Yes/No

8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)
   a. Eye irritation: Yes/No
   b. Skin allergies or rashes: Yes/No
   c. Anxiety: Yes/No
d. General weakness or fatigue: Yes/No

e. Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ever lost vision in either eye (temporarily or permanently): Yes/No

11. Do you currently have any of the following vision problems?
   
   a. Wear contact lenses: Yes/No
   
   b. Wear glasses: Yes/No
   
   c. Color blind: Yes/No
   
   d. Any other eye or vision problem: Yes/No

12. Have you ever had an injury to your ears, including a broken ear drum: Yes/No

13. Do you currently have any of the following hearing problems?
   
   a. Difficulty hearing: Yes/No
   
   b. Wear a hearing aid: Yes/No
   
   c. Any other hearing or ear problem: Yes/No

14. Have you ever had a back injury: Yes/No

15. Do you currently have any of the following musculoskeletal problems?
   
   a. Weakness in any of your arms, hands, legs, or feet: Yes/No
   
   b. Back pain: Yes/No
   
   c. Difficulty fully moving your arms and legs: Yes/No
   
   d. Pain or stiffness when you lean forward or backward at the waist: Yes/No
   
   e. Difficulty fully moving your head up or down: Yes/No
   
   f. Difficulty fully moving your head side to side: Yes/No
   
   g. Difficulty bending at your knees: Yes/No
   
   h. Difficulty squatting to the ground: Yes/No
   
   i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No
   
   j. Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No
If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No
   If "yes," name the chemicals if you know them:
   _______________________________________________________________________________________
   _______________________________________________________________________________________
   _______________________________________________________________________________________

3. Have you ever worked with any of the materials, or under any of the conditions, listed below:
   a. Asbestos: Yes/No
   b. Silica (e.g., in sandblasting): Yes/No
   c. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No
   d. Beryllium: Yes/No
   e. Aluminum: Yes/No
   f. Coal (for example, mining): Yes/No
   g. Iron: Yes/No
   h. Tin: Yes/No
   i. Dusty environments: Yes/No
   j. Any other hazardous exposures: Yes/No
   If "yes," describe these exposures:
   _______________________________________________________________________________________
   _______________________________________________________________________________________
   _______________________________________________________________________________________

4. List any second jobs or side businesses you have:
   _______________________________________________________________________________________

5. List your previous occupations:
   _______________________________________________________________________________________

6. List your current and previous hobbies:
   _______________________________________________________________________________________

7. Have you been in the military services? Yes/No
   If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes/No

8. Have you ever worked on a HAZMAT team? Yes/No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No
   If "yes," name the medications if you know them:
   _______________________________________________________________________________________
10. Will you be using any of the following items with your respirator(s)?
   a. HEPA Filters: Yes/No
   b. Canisters (for example, gas masks): Yes/No
   c. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:
   a. Escape only (no rescue): Yes/No
   b. Emergency rescue only: Yes/No
   c. Less than 5 hours per week: Yes/No
   d. Less than 2 hours per day: Yes/No
   e. 2 to 4 hours per day: Yes/No
   f. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:
   a. Light (less than 200 kcal per hour): Yes/No
      If "yes," how long does this period last during the average shift: __________ hrs. __________ mins.
      Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.
   b. Moderate (200 to 350 kcal per hour): Yes/No
      If "yes," how long does this period last during the average shift: __________ hrs. __________ mins.
      Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.
   c. Heavy (above 350 kcal per hour): Yes/No
      If "yes," how long does this period last during the average shift: __________ hrs. __________ mins.
      Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes/No
    If "yes," describe this protective clothing and/or equipment:
    ________________________________________________________________________________________
    ________________________________________________________________________________________

14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No

15. Will you be working under humid conditions: Yes/No
16. Describe the work you'll be doing while you're using your respirator(s):
_______________________________________________________________________________________
_______________________________________________________________________________________

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):
_______________________________________________________________________________________
_______________________________________________________________________________________

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):
   Name of the first toxic substance: _____________________________________________
   Estimated maximum exposure level per shift:________________________________
   Duration of exposure per shift:______________________________________________
   Name of the second toxic substance:________________________________________
   Estimated maximum exposure level per shift:_______________________________
   Duration of exposure per shift:____________________________________________
   Name of the third toxic substance:_________________________________________
   Estimated maximum exposure level per shift:_______________________________
   Duration of exposure per shift:____________________________________________
   The name of any other toxic substances that you'll be exposed to while using your respirator:
_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):
_______________________________________________________________________________________
**Periodic Respirator Questionnaire**  
*after Initial Medical Clearance and Fit Testing*  
**Annual Requirement**

After the initial medical clearance to be fit tested to wear a negative pressure respirator, you will need only to answer the following 5 questions. If your response is negative for all these questions then you will be considered approved for fit testing. If you have any positive response to the questionnaire do not hand it back to your manager or safety officer but mail it to Employee Health Service, attention Dr. Oluremi Aliyu at MC 6210 and wait for a telephone call from the doctor or her representative.

**Name:**  
**Department:**  
**Work Telephone:**  
**Home Telephone:**  
**DOB:**  
**SSN:** XXX-XX-______(only last 4 digits)

1. Did you have any problems wearing the TB mask assigned for you since your last fit testing one year ago?  
   - Yes  
   - No

2. Did you have any major facial or dental surgery or trauma?  
   - Yes  
   - No

3. Did you get new dentures or dental bridges since your last fit testing?  
   - Yes  
   - No

4. Did you have significant weight loss (more than 10% of your body weight) since last fit testing?  
   - Yes  
   - No

5. Do you have any medical or other condition that you would like to discuss with a physician?  
   - Yes  
   - No
APPENDIX C

PAPR USE FOR FIRST RECEIVERS
(5/12)

I. INTRODUCTION

The Occupational Safety and Health Administration published a best management practices document entitled “OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances”, July 2004. In this document, OSHA provides practical information to help hospitals address employee protection and training as part of emergency planning for mass casualty incidents involving hazardous substances. OSHA also realized that those individuals receiving victims from a hazardous materials incident remote from the Hospital would not be exposed to the same level of risk as a First Responder (ie: Fire Department Personnel). This document also addresses terrorists events and other intentional acts. Healthcare workers who may be exposed to chemical, biological or radiological materials when a Hospital receives contaminated patients from a work site remote from the location where the hazardous materials incident occurred are designated FIRST RECEIVERS. Individuals categorized as FIRST RECEIVERS at the UCONN Health Center would be Emergency Department Staff and Physicians.

Emergency Department Staff who will be working in the Hospital Decontamination Zone are classified as First Receivers and must wear appropriate PPE for the hazards present. This zone will usually be the immediate area outside of the ED entrance and terminate at the ED door. The ED itself is the Hospital Post-Decontamination Zone and requires no special PPE. If the potential for contamination exists within the ED, then the appropriate areas will be designated as a Hospital Decontamination Zone. This policy describes the respirator requirements only for entering a Hospital Decontamination Zone.

II. RESPONSIBILITIES

The following groups or individuals have been assigned the following responsibilities.

EMERGENCY DEPARTMENT NURSE MANAGER

The ED Nurse Manager is responsible for determining who may enter a Hospital Decontamination Zone, ensuring these individuals are properly trained in the emergency procedures and use of personal protective equipment, and are retrained as required by OSHA. Training activities (hours and topic) will be documented by the Nurse Manager.

OFFICE OF RESEARCH SAFETY

The Office of Research Safety (2723) provides training of ED staff as requested by the ED Nurse Manager. The Office of Research Safety also maintains the PAPR units located in the Emergency Decon Trailer and provides backup supplies as needed.

FACILITIES MANAGEMENT ENVIRONMENTAL CONTROL CENTER

The Environmental Management Control Center (2338) maintains and keeps operational all PAPR’s located in their area. The ECC provides PAPR’s to ED staff as needed and delivers units to the ED if workload permits.
EMERGENCY DEPARTMENT STAFF/PHYSICIANS

It is the primary responsibility of the ED staff/physicians not to enter the Hospital Decontamination Zone without proper training and instruction on use of a PAPR. A PAPR is required when entering a Hospital Decontamination Zone.

III. FIRST RECEIVER TRAINING REQUIREMENTS

OSHA suggests that First Receivers obtain a minimum 8 hours of training with annual refreshers prior to entering a Hospital Decontamination Zone. OSHA also suggests that each Hospital structure training such that it is specific to their facility. It has been determined that for the UCHC Emergency Department the following training guidelines will adequately inform the ED Staff on potential hazards and proper PPE use. The Emergency Department Nurse Manager will document all training.

1. Annual participation in PPE training session
2. Annual Competency Training for Decontamination Procedures
3. Annual Bloodborne Pathogen Refresher training

IV. RESPIRATORY PROTECTION FOR FIRST RECEIVERS

Utilizing the recommendations from the OSHA Best Practices document, staff entering the Hospital Decontamination Zone must don a powered air purifying respirator (PAPR) that provides an adequate protection factor and is NIOSH approved. The filter canister(s) must be a combination 99.97% high-efficiency particulate air (HEPA)/organic vapor/acid gas respirator cartridge that is NIOSH approved. This is commonly referred to as a NBC (nuclear, biological, chemical) filter combination. The requirements for entering the Hospital Decontamination Zone are

1. Entry into the Hospital Decontamination Zone is prohibited unless proper training and instructions on proper use of the PAPR are documented with annual refreshers as required. Other PPE is also required.
2. PAPR’s are available in the Decontamination Trailer and through the Facilities Environmental Control Center (2338). PAPRs in the decon trailer are intended for immediate use, and those at the ECC for backup.
APPENDIX D

Standard Number: 1910.134 App D
Standard Title: (Mandatory) Information for Employees Using Respirators When not Required Under Standard.
SubPart Number: I
SubPart Title: Personal Protective Equipment

Appendix D to Sec. 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

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