

Reproductive Health Program

Responsible Administrator: Research Safety Programs Manager
Revised: November 2023

Summary: This section outlines the procedures of the Reproductive Health Program that is streamlined through the Environmental Health & Safety (EHS) Department and in collaboration with Center for Occupational & Environmental Health (COEH)

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1. Program Description

This program outlines the referral process of the reproductive health consult of all individuals (employees, students, and volunteers) on campus from occupational exposure to chemical, biological, radioactive, and other substances that are known or suspected of being capable of posing a hazard to human reproduction.

2. Scope

The objective of the Reproductive Health Program is to refer the reproductive health individual to the Center for Occupational & Environmental Health (COEH) for a medical consult by a licensed medical practitioner.

3. Definitions

Declared Pregnant Woman – A woman who voluntarily informs UCI EHS in writing, of her pregnancy and the estimated date of conception.

Individual - A female or male employee, student, or volunteer who expresses a concern about their reproductive health potentially being affected by their work area.

Developmental Toxicity: Adverse effects on the developing organism that may occur anytime from conception to sexual maturity. Results may include spontaneous abortion, structural or functional defects, low birth weight, or effects that may appear later in life.

The key consideration with reproductive and developmental toxicity is that exposures during a critical period may result in long-term health effects. Thus, it is essential to recognize potential risks and intervene early.

Reproductive Toxicity: Adverse effects on the health of the reproductive organs, endocrine system, or gametes (egg or sperm) from exposure to an exogenous agent. May result in consequences such as menstrual dysfunction, damage to gametes (ova or sperm) or gamete development, impaired fertility, or inability to maintain a pregnancy.

Reproductive Hazard: Any chemical, radiological, physical, or biological agent capable of impacting an individual's ability to conceive, maintain a pregnancy, or result in a birth defect.

Mutagen: a physical or chemical agent that changes the genetic material, usually DNA, of an organism and thus increases the frequency of mutations above the natural background level.

Teratogen: These substances may cause birth defects via a toxic effect on an embryo or fetus.

Exposure Limits:

California Occupational Safety and Health Administration (Cal/OSHA)

- Although the California State Occupational Safety and Health Administration (Cal-OSHA) has established occupational exposure limits for numerous hazardous materials (Title 8, Section 5144), there are no general reproductive health standards.
- Cal/ OSHA has issued a limited number of standards (e.g., Lead, Dibromochloropropane, Ethylene Oxide, cadmium metal.) that acknowledge and provide partial protection from reproductive risks to these specific chemicals.
- A developing fetus may also be adversely affected by exposures lower than those generally considered safe for adults. The University of California, Irvine's goal is to keep exposures as low as reasonably achievable to minimize the potential for reproductive or developmental hazards.

California Department of Health Services (CDHS)

- The CDHS has an occupational radiation dose limit for the whole body of 5000 millirems per year for adult workers (>18). Persons under 18 must consult with the UCI Radiation Safety Officer.
- The limit for the embryo/fetus of a declared pregnant woman during the entire gestation period is 500 millirem. Furthermore, the National Council on Radiation Protection and Measurements (NCRP) recommends a monthly equivalent dose limit of 50 millirems to the embryo/fetus once the pregnancy is known. Contact the UCI Radiation Safety Officer radsafety@uci.edu for enrollment into the radiation monitoring program.

4. Responsibilities

Environmental Health and Safety (EHS) Department

EHS will generate a referral for COEH for a medical consult by a licensed medical practitioner.

- Respond to an individual (a female or male employee, student, or volunteer) who expresses a concern about their reproductive health potentially being affected by their work area. Concerns may include:
 - Pregnancy, or intent to become pregnant
 - Fertility
- Compile referral packet to include COEH referral form, UC Irvine Reproductive Hazard Questionnaire (Appendix A), and Respirator Medical Evaluation Questionnaire (Appendix B), if applicable.
- Assist in coordinating air monitoring and fit testing when applicable.

Supervisors and Principal Investigators

Supervisors have the primary responsibility for the implementation of the Reproductive Health Protection Guideline in their work area. They must:

- Maintain an inventory of chemical, biological, and radiological agents used in the work area.
- Be familiar with the hazards associated with these agents - including reproductive or developmental hazards.
- Develop operation-specific Standard Operating Procedures (SOPs).
- Provide operation-specific training to employees, students, and volunteers.
- Coordinate with Human Resources regarding employee workplace restrictions provided by their health care provider (if applicable).
- Ensure the use of exposure control measures (under Program Components) to control exposures to potential hazards to the lowest achievable levels.
- Measures may involve:
 - Substitution of the reproductive agent with a less hazardous agent when possible.
 - Engineering controls include an enclosure, local exhaust ventilation (fume hoods, biosafety cabinet, etc.)
 - Administrative procedures, including job rotation or elimination of higher hazard tasks

- during pregnancy.
- Personal protective equipment use, including protective clothing.
- Good hygiene - hand washing, clothing changes, and use of showers as appropriate.

Employees, Students, and Volunteers

The employees, students, and volunteers are responsible to:

- Comply with all university policies and Cal/OSHA requirements and regulations to ensure a safe and healthy working environment.
- Utilize engineering or administrative controls as applicable.
- Utilize protective clothing and equipment provided to decrease exposure to hazards in the work area.
- Complete all required training.
- Follow operation-specific SOPs.
- Report to supervisor unsafe or hazardous working conditions, exposure incidents, or injuries.
- Complete the Reproductive Hazard Questionnaire (Appendix A) for any declared pregnancy and provide to COEH or private medical practitioner.
- Provide a brief job description to COEH.
- Consult with their health care provider regarding reproductive and developmental health issues.
- Submit any health care provider certifications regarding work restrictions or limitations to their supervisor.
- Students are required to enroll with [the UCI Student Disability Center](#).

Occupational Health Physician (COEH)

The occupational physician is responsible for:

- When referred by EHS, evaluating the potential reproductive hazards of the pregnant employee/student by:
 - Reviewing the employee's Reproductive Health Questionnaire.
 - Reviewing reports or evaluations conducted by EHS of the individual's work area and operations.
 - In conjunction with the employee/student's physician, advising the individual on any limitations or modifications to her work.

Human Resources

The UC Irvine Human Resources (HR) office is responsible for a consultation to employees or supervisors regarding work restrictions or modifications as needed. The department offers employee training for prospective parents on their benefits and available resources. Assisting the supervisor to follow-through on workplace limitations and/or modifications indicated by the occupational physician.

Student Disability Center

Assist the student and follow-through on recommended accommodations for disabled students in compliance with federal mandates. Student Disability Center providers accomplish this task by:

- determining whether the students have a disability that entitles them to accommodation,
- identifying what accommodations, if any, are available, and
- working with academic administrators to ensure that accommodations provided do not compromise, eliminate, or impact the academic requirements that each student needs to meet.

Deans, Department Chairs, and Directors

Ensure that all principal investigators and laboratory supervisors are aware of the responsibilities and procedures in this guideline and provide support for the implementation of these guidelines. Deans are responsible for approving reproductive health accommodation requests that are not within the scope of the Americans with Disabilities Act and making a final determination regarding accommodation requests when the laboratory supervisor has determined that accommodation is not reasonable.

5. Program Components

Methods of Exposure Control

The most desirable method of managing risk to pregnancy and reproductive health of employees, students, and volunteers is to control exposure from chemical, biological, and physical agents to the lowest achievable

levels for all individuals. This may be achieved through a combination of the following:

- Substitute the reproductive agent with a less hazardous agent when possible.
- Use of engineering controls, such as enclosure, local exhaust ventilation (fume hoods, biosafety cabinet, etc.).
- Use of safe work practices and operation-specific procedures.
- Appropriate use of personal protective equipment.
- Hand washing, clothing changes, and use of showers as appropriate.
- Administrative controls may include:
 - Postponing procedures/operations that may pose a developmental risk until after the pregnancy.
 - Using job rotation to reduce exposures.
 - Transferring the individual to a job, which does not involve exposure to reproductive or developmental hazards.
- It could be postponed for students, of course, later without hindering students' academic progress until after the pregnancy.

Safety Information & Training

The University promotes proactive recognition of safety hazards, including early identification of potential reproductive hazards so employees, students, and volunteers can seek appropriate assistance. To that end, information about this Reproductive Health Protection Guideline and reproductive hazard information is posted on the EHS website and provided during EHS chemical, radiological, and biological safety training.

Safety information may include:

- Copy of this guideline and its attachments
- Information about the individual's workplace hazards
- Information on work practices to reduce exposures
- Laboratory Safety Fundamentals
- Radiation Training
- UC Irvine Prenatal Radiation Exposure Guidelines
- Safety Data Sheets

Declaration of Pregnancy or Intended Pregnancy

If an employee, student, or volunteer wishes the University to be involved in helping protect her embryo/fetus, she must voluntarily declare her actual, suspected, or intended pregnancy to her supervisor and EHS. Individuals may contact EHS for a confidential consultation if desired.

It is acknowledged that an individual may choose to maintain their reproductive status as confidential for a time. However, the supervisor's involvement is an essential part of the University's Reproductive Health Protection Guideline.

Individuals may receive safety information about reproductive or developmental hazards posed by potential chemical, radiological, biological, or physical agents upon request from EHS with or without declaring actual, suspected, or planned pregnancy.

The sequence of Events (Communication, Evaluation, Recommendations)

1. An individual (a female or male employee, student, or volunteer):
 - a. declares their pregnancy by notifying their supervisor and EHS of their current pregnancy, or intent to become pregnant
 - b. expresses concern about reproductive health
 - c. When applicable, individuals may voluntarily inform the UC Irvine Radiation Safety Officer in writing when they become pregnant, suspect a pregnancy, or intend to become pregnant. Female radiation workers should refer to the UC Irvine Prenatal Radiation Exposure Guidelines received in their training.
2. The individual completes the Reproductive Hazard Questionnaire (Appendix A) in addition to photos of

- lab work area or applicable areas of lab work and submits to COEH on the initial scheduled appointment.
3. The individual is advised to take the following information to their health care provider for discussion:
 - Completed Reproductive Hazard Questionnaire
 - Job/task description
 - SDS for any applicable hazardous materials.
 4. Concurrently if the individual accepts our occupational health program provides a reproductive health consult with the campus reproductive health/ Toxicologist through the Center for Occupational and Environmental Health (COEH). The occupational health physician will recommend any restrictions or limitations on individual work activities if needed.
 - As needed, at the individual's request, the occupational physician may consult with the employee's personal physician regarding any work restrictions.
 5. The individual provides written limitations to the supervisor or through Human Resources or Student Disabilities Center prepared by the physician, if any.
 - Student Disability Services will work with the individual if modifications or academic accommodations are needed to avoid possible exposures.
 6. Supervisors are responsible for notifying Human Resources, and EHS of any work restrictions received.
 7. Supervisors are responsible for implementing any recommended work restrictions and EHS exposure control and/or training recommendations.
 8. Employees and supervisors may seek assistance from Human Resources regarding the implementation of work restrictions and EHS recommendations.

Anti-discrimination Policy

- The University does not discriminate by sex, race, disability, age, or any other protected characteristic in the hiring, assignment, or promotion of employees because of actual or perceived differences in susceptibility to reproductive effects caused by toxic substances.
- However, the transfer of a particular employee or employees may be necessary in some cases to remove an employee or employees from exposure to toxic substances at levels above those allowed by applicable regulations. Such transfers will only be considered where materials substitution, additional engineering controls, and safe work practices are technologically unfeasible or ineffective in reducing exposures to levels prescribed by applicable regulations.
- If the employee or employees must be removed from exposure, the group of employees affected will be defined as narrowly as possible, considering the risks of the particular substance, while providing for the greatest possible element of employee choice consistent with adequate protection of their reproductive health and health of their offspring.
- No employee removed from exposure will suffer any loss of earnings.

6. Reporting Requirements - None

7. References

- [UC Irvine Prenatal Radiation Exposure Guideline](#)

Other Resources:

- [EHS website](#)
- [NIOSH](#)
- [March of Dimes](#)
- [UC Irvine Parenting Resources](#)
- [List of Chemicals Know to the State of California to Cause Reproductive Toxicity](#)
- [The National Toxicology Program Center for the Evaluation of Risk to Human Reproduction](#)
- [American Society for Reproductive Medicine](#)
- [CDC's Reproductive Health Information Source](#)

- c) Can you smell or taste any chemical fumes or vapors where you work? If yes, which ones?
- d) Do you feel sick when you work with any of the chemicals, and feel better at other times?
- e) Do any of the chemicals you work with get on your skin? If yes, which ones?

3. Do you have any specific health or safety concerns about your work? If so, describe:

4. Do you work in the vivarium with live animals or animal tissues? Yes No
if yes, have you updated your LAOHP Form online? Yes No

5. Do you store or consume food or beverages in your workplace?
 Yes No

6. What type of personal protective equipment do you wear while working?

Eye/Face Protection <input type="checkbox"/> Safety glasses with side shields <input type="checkbox"/> Laser safety glasses <input type="checkbox"/> Safety goggles <input type="checkbox"/> Face shield <input type="checkbox"/> Welder's helmet/ face shield	Foot Protection <input type="checkbox"/> Safety shoes/ boots <input type="checkbox"/> Toe caps <input type="checkbox"/> Metatarsal guards <input type="checkbox"/> Rubber boots	Head Protection <input type="checkbox"/> Hard hat <input type="checkbox"/> Hearing protection – earplugs, earmuffs
Body Protection <input type="checkbox"/> Fall restraint/fall protection <input type="checkbox"/> Rubber apron <input type="checkbox"/> Disposable Tyvek lab coat/coveralls <input type="checkbox"/> Lab coat or coveralls <input type="checkbox"/> Welding leather sleeve guards <input type="checkbox"/> Nomex Coveralls <input type="checkbox"/> Other: <input type="text"/>	Hand Protection/Gloves <input type="checkbox"/> Leather <input type="checkbox"/> Natural rubber <input type="checkbox"/> Cotton (coated/not coated) <input type="checkbox"/> Nitrile <input type="checkbox"/> Heat resistant <input type="checkbox"/> Neoprene <input type="checkbox"/> Chemical resistant <input type="checkbox"/> Butyl rubber <input type="checkbox"/> Latex <input type="checkbox"/> Other (PVC, PVA, Viton) <input type="checkbox"/> Cryogenic <input type="checkbox"/> Anti-vibration <input type="checkbox"/> Cut resistant (e.g., Kevlar) <input type="checkbox"/> Other: <input type="text"/>	
Respirator Protection <input type="checkbox"/> Filtering Face piece respirator (N, P or R) <input type="checkbox"/> Air purifying respirator <input type="checkbox"/> Supplied air line		
APR Chemical Cartridge/Filter Types: <input type="checkbox"/> Multi-gas/OV <input type="checkbox"/> AG/Acid Gas		

- Half face piece
 Self-contained breathing apparatus (SCBA)
 Full face piece
 Escape-only air pack
 PAPR unit

- OV/Organic Vapor
 OV/AG
 P-100
 Ammonia

7. Have you had any spills or unintentional exposures recently? If so, describe:

8. Describe your work environment:

9. If in a laboratory environment, how much of your time do you spend doing:

- a) Work on a bench _____%
 b) Work in a fume hood _____%
 c) Office work _____%
 d) Other _____%

10. Are other people working in the same room as you? Yes No

11. Describe the physical demands of your work:

	Duration & Frequency	Description
Lifting	_____	_____
Bending/Twisting	_____	_____
Sitting	_____	_____
Standing	_____	_____

Person Completing Form

Signature

Date

3. Have you ever had any of the following pulmonary or lung problems?		
a. Asbestosis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Asthma	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Chronic bronchitis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Emphysema	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Pneumonia	<input type="checkbox"/> No	<input type="checkbox"/> Yes
f. Tuberculosis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
g. Silicosis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
h. Pneumothorax (collapsed <u>lung</u>)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
i. Lung cancer	<input type="checkbox"/> No	<input type="checkbox"/> Yes
j. Broken ribs	<input type="checkbox"/> No	<input type="checkbox"/> Yes
k. Any chest injuries or surgeries	<input type="checkbox"/> No	<input type="checkbox"/> Yes
l. Any other lung problem that you've been told about	<input type="checkbox"/> No	<input type="checkbox"/> Yes
4. Do you currently have any of the following symptoms of pulmonary or lung illness?		
a. Shortness of breath	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Shortness of breath when walking with other people at an ordinary pace on level ground	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Have to stop for breath when walking at your own pace on level ground	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Shortness of breath when washing or dressing yourself	<input type="checkbox"/> No	<input type="checkbox"/> Yes
f. Shortness of breath that interferes with your job	<input type="checkbox"/> No	<input type="checkbox"/> Yes
g. Coughing that produces phlegm (thick <u>sputum</u>)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
h. Coughing that wakes you early in the morning	<input type="checkbox"/> No	<input type="checkbox"/> Yes
i. Coughing that occurs mostly when you are lying down	<input type="checkbox"/> No	<input type="checkbox"/> Yes
j. Coughing up blood in the last month	<input type="checkbox"/> No	<input type="checkbox"/> Yes
k. Wheezing	<input type="checkbox"/> No	<input type="checkbox"/> Yes
l. Wheezing that interferes with your job	<input type="checkbox"/> No	<input type="checkbox"/> Yes
m. Chest pain when you breathe deeply	<input type="checkbox"/> No	<input type="checkbox"/> Yes
n. Any other symptoms that you think may be related to lung problems	<input type="checkbox"/> No	<input type="checkbox"/> Yes
5. Have you ever had any of the following cardiovascular or heart problems?		
a. Heart attack	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Stroke	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Angina	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Heart failure	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Swelling in your legs or feet (not caused by <u>walking</u>)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
f. Heart arrhythmia (heart beating <u>irregularly</u>)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
g. High blood pressure	<input type="checkbox"/> No	<input type="checkbox"/> Yes
h. Any other heart problem that you've been told about	<input type="checkbox"/> No	<input type="checkbox"/> Yes
6. Have you ever had any of the following cardiovascular or heart symptoms?		
a. Frequent pain or tightness in your chest	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Pain or tightness in your chest during physical activity	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Pain or tightness in your chest that interferes with your job	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. In the past two years, have you noticed your heart skipping or missing a beat	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Heartburn or indigestion that is not related to eating	<input type="checkbox"/> No	<input type="checkbox"/> Yes
f. Any other symptoms that you think may be related to heart or circulation problems	<input type="checkbox"/> No	<input type="checkbox"/> Yes
7. Do you currently take medication for any of the following problems?		
a. Breathing or lung problems	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Heart trouble	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Blood pressure	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Seizures (<u>fits</u>)	<input type="checkbox"/> No	<input type="checkbox"/> Yes

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.) <input type="checkbox"/> Never used a respirator before	<input type="checkbox"/> No	<input type="checkbox"/> Yes
a. Eye irritation	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Skin allergies or rashes	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Anxiety	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. General weakness or fatigue	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Any other problem that interferes with your use of a respirator	<input type="checkbox"/> No	<input type="checkbox"/> Yes
9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Questions 10 to 15 below must be answered by every employee who has been selected to use a **full-face mask 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)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
11. Do you currently have any of the following vision problems?		
a. Wear contact lenses	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Wear glasses	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Color blind	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Any other eye or vision problem	<input type="checkbox"/> No	<input type="checkbox"/> Yes
12. Have you ever had an injury to your ears, including a broken ear drum?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
13. Do you currently have any of the following hearing problems?		
a. Difficulty hearing	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Wear a hearing aid	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Any other hearing or ear problem	<input type="checkbox"/> No	<input type="checkbox"/> Yes
14. Have you ever had a back injury?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
15. Do you currently have any of the following musculoskeletal problems?		
a. Weakness in any of your arms, hands, legs, or feet	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Back pain	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Difficulty fully moving your arms and legs	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Pain or stiffness when you lean forward or backward at the waist	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Difficulty fully moving your head up or down	<input type="checkbox"/> No	<input type="checkbox"/> Yes
f. Difficulty fully moving your head side to side	<input type="checkbox"/> No	<input type="checkbox"/> Yes
g. Difficulty bending at your knees	<input type="checkbox"/> No	<input type="checkbox"/> Yes
h. Difficulty squatting to the ground	<input type="checkbox"/> No	<input type="checkbox"/> Yes
i. Climbing a flight of stairs or a ladder carrying more than 25 lbs.	<input type="checkbox"/> No	<input type="checkbox"/> Yes
j. Any other muscle or skeletal problem that interferes with using a respirator	<input type="checkbox"/> No	<input type="checkbox"/> Yes

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?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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?	<input type="checkbox"/> No	<input type="checkbox"/> Yes

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?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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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	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Silica (e.g., in sandblasting)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Tungsten/cobalt (e.g., grinding or welding this material)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
d. Beryllium	<input type="checkbox"/> No	<input type="checkbox"/> Yes
e. Aluminum	<input type="checkbox"/> No	<input type="checkbox"/> Yes
f. Coal (for example, mining)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
g. Iron	<input type="checkbox"/> No	<input type="checkbox"/> Yes
h. Tin	<input type="checkbox"/> No	<input type="checkbox"/> Yes
i. Dusty environments	<input type="checkbox"/> No	<input type="checkbox"/> Yes
j. Any other hazardous exposures	<input type="checkbox"/> No	<input type="checkbox"/> Yes

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?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
If "yes," were you exposed to biological or chemical agents (either in training or combat)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes

8. Have you ever worked on a HAZMAT team?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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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)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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	<input type="checkbox"/> No	<input type="checkbox"/> Yes
b. Canisters (for example, gas <u>masks</u>)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
c. Cartridges	<input type="checkbox"/> No	<input type="checkbox"/> Yes

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

12. During the period you are using the respirator(s), is your work effort		
a. Light (less than 200 kcal per hour)	<input type="checkbox"/> No	<input type="checkbox"/> Yes

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)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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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)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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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?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
If "yes," describe this protective clothing and/or equipment _____		

14. Will you be working under hot conditions (temperature exceeding 77 deg. F)?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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15. Will you be working under humid conditions?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
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16. Describe the work you'll be doing while you're using your respirator(s)?
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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)
