

TRINITY COUNTY PERSONNEL POLICY

SUBJECT:	RESPIRATORY PROTECTION PLAN FOR TRINITY	
	COUNTY EMPLOYEES AND EMPLOYEES WORKING	
	AS DISASTER SERVICE WORKERS	
POLICY NO.:	2020-01	
INITIAL DATE PREPARED:	March 25, 2020	
LAST DATE REVISED:		
RESOLUTION NO.:	N/A	

I. PURPOSE

It is Trinity County's policy to institute and enforce a Respiratory Protection Plan as set forth in this Policy Statement. This Policy does not supersede any department policies which may be stricter than said forth below.

IMPACTED EMPLOYEES: Specific positions have been designated to respond as Disaster Service Workers to non-routine or emergency operations such as working outside in hazardous wildfire smoke conditions or a spill of a hazardous substance. The impacted departments include; Behavioral Health, Building and Development Services, Cannabis, Department of Transportation, Environmental Health, General Services, Health & Human Services, Probation, The Office of Emergency Services, Risk Management, Sheriff's Office, Solid Waste, Transit and the Veterans Service Office. Please see Appendix D for specific positions within the listed departments that will be impacted.

SUBSEQUENT EMPLOYEES: Any and all employees sworn in as Disaster Service Workers.

II. **DEFINITIONS**

Cal/OSHA – California Occupational Safety and Health Administration

CDC – Centers for Disease Control

PPE – Personal Protective Equipment

NIOSH – National Institute for Occupational Safety and Health

OESM – Office of Emergency Services Manager

RPP – Respiratory Protection Plan

III. APPLICATION

- 1. This program applies to all employees who are required to wear respirators during normal work operations. It also applies to employees who have been designated to respond to non-routine or emergency operations such as a spill of a hazardous substance or work outside in hazardous wildfire smoke conditions.
- **2.** The department shall conduct a survey of the work and work processes to determine if the atmospheric conditions exist or may reasonably be expected to exist that would create "harmful exposure" to employees.
- **3.** This program does not apply if the survey results indicate that no conditions exist or may reasonably be expected to exist that create "harmful exposure" to employees.
- **4.** This program does apply if the survey results indicate that conditions do exist or may reasonably be expected to exist that create "harmful exposure" to employees.

IV. TYPES OF RESPIRATORS

The atmosphere and the air contaminant level that a person may encounter dictate they type of respirator that must be worn. Respirator Types are listed below:

- Air-purifying respirator (APR)
- Filter Facepiece (dust mask)
- Half Mask or Full Filtering Facepieces

If the hazard is mild you may be given a particulate filter. Particulate filters are listed below:

- HEPA Filter
- N-100
- P-100
- N-95

Please refer to Appendix C for more details on the Respirators and Filters listed above.

V. GENERAL POLICY

- 1. This program applies to work operations in which there are "harmful exposure" of employees to dust, fog, fumes, mists, gases, smokes, sprays and vapors. For purposes of this program, "harmful exposure" is defined as exposure in excess of any permissible limit prescribed by General Industry Safety Order 5155 (chemical airborne contaminants) or of such a nature by inhalation as to result in, or have a probability to result in, injury, illness, disease, impairment or loss of function.
- 2. Respirators shall be provided to employees when such equipment is necessary to protect the health of the employee. However, in the control of those occupational diseases caused by breathing contaminated air, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by

- accepted engineering controls (e.g. enclosure or confinement, general or local ventilation, substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this program.
- 3. Respirators shall only be used when required to protect an employee from "harmful exposure." Voluntary use of respirators by employees is prohibited, with the exception of voluntary use of filtering facepieces (dust masks), unless approval has been obtained from Risk Management, the Department Head or Designee, and/or the Health Officer.

VI. RESPONSIBILITIES

Human Resources/ Risk Management

- Shall be responsible for oversight and enforcement of this policy
- Facilitating and/or coordinating all training associated with this policy
- Ensuring maintenance of records are being maintained as required by Title 8, California Code of Regulations (CCR)
- Reviewing and updating training as needed, ensuring compliance with occupational safety requirements and recommendations
- Coordinating initial and annual fit-testing for County personnel

Department Heads/Designees/Managers/Supervisors

All department heads their designees, managers and supervisors shall be responsible for overseeing the Respiratory Protection Plan (RPP) and protecting the health of their employees.

Managers/Supervisors shall:

- Participate in the selection of appropriate respiratory protective equipment for each task or potential exposure
- Request assistance when evaluating new operations that may present hazards
- Identify employees who may need respirators
- Ensure employees are cleared, properly fit-tested and equipped with respirators
- Participate in providing updates to the RPP
- Conducting hazard assessments, and ensuring that the designated County Personnel listed on Appendix D. complete initial medical clearance to wear a respirator
- Designate mandatory respirator usage areas and/or field assignments
- Ensure their employees are properly trained initially before an event occurs and annually thereafter.
- Selecting respirators for purchase
- Purchasing necessary equipment
- Ensuring the repair or replacement of equipment
- Ensuring respirator maintenance

• In consultation with the OES Manager, recommending the type and level of respiratory protection for each task or work location

Office of Emergency Services Manager (OESM)

The OESM will be responsible for:

• Providing annual fit-testing for all designated employees listed in Appendix D.

Employees

Employees have the responsibility to comply with all respiratory protection policies, and also to be fit-tested and equipped with appropriate respirators before entering any work location that involves hazardous situations requiring respiratory protection.

Employees shall:

- Use respirators when required
- Attend annual respirator protection training as required
- Ensure that facial hair (to include sideburns) does not cross the respirator sealing surface
- Promptly notify their immediate supervisor for any of the following:
 - o Suspicion that respirator no longer fits properly
 - o Suspicion that a respiratory hazard is not adequately addressed in the workplace
 - Changes in personal medical status that may impact ability to safely wear a respirator
 - o Any other concerns regarding this program
- Obtain medical clearance as required. If medical clearance is not obtained from the Medical Provider an employee shall not work in any hazardous condition.

VII. RESPIRATOR SELECTION

The Supervisor, in consultation with the OES Manager, will select respirators to be used by staff based on the hazards to which employees may be exposed and in accordance with all Cal/OSHA regulations. The hazard evaluation will include the following:

- Identifying the hazardous substances or pathogens
- Reviewing work processes to determine where potential exposures may occur
- Quantifying potential exposure levels, if possible
- Selecting the appropriate respirator based on degree of exposure and the assigned protection factors found in the Cal/OSHA Respiratory Standard. The NIOSH Respirator Decision Logic and other guidelines issued by CDC will also be considered.
- Identifying and communicating the limitations of the selected respirator to the employee(s)

The hazard assessment will be updated any time a new exposure is anticipated.

Respirators shall be NIOSH-approved. A label or statement of certification should appear on the respirator or packaging. It will list what the respirator is designed for and how much protection it will provide. N95 respirators with exhalation should be considered for non-sterile environments to reduce heat and moisture buildup during long wearing periods.

VIII. MEDICAL EVALUATIONS

Respirator use may place a physiological burden on employees based on type of respirator worn, the conditions under which the respirator is used, and the medical status of the employee. Employees whose work activities require the use of respiratory PPE shall receive medical clearance prior to initial fit-testing and use, and annually thereafter. Medical evaluations will be performed at no cost to the employee by a physician or licensed health care professional.

The employee shall complete the <u>Respiratory Protection Medical Evaluation Questionnaire</u> (Appendix A) and bring this to the medical appointment. This form is confidential and shall be shared only with health care professionals.

The health care professional will determine whether the employee can wear a respirator based on a review of the questionnaire, medical tests and/or pulmonary function tests. They will provide a copy of the <u>Respirator Medical Clearance Form</u> (Appendix A) to the employee, who will submit it to their supervisor.

Additional or subsequent medical evaluations will be performed under any of the following circumstances:

- An employee reports medical signs or symptoms related to the ability to use a respirator
- A physician or other licensed health care professional informs the employee that they need to be re-evaluated
- Observations made during fit-testing indicate a need for re-evaluation
- A change occurs in workplace conditions (e.g. physical exertion required or temperature change) that may result in a substantial increase in the physiological burden placed on an employee

IX. FIT TESTING

Before an employee is required to use any respirator with a negative or positive pressure tight fitting facepiece (e.g. an N95), the employee must be fit-tested with the same make, model and style to determine which size is to be used.

Fit testing procedures shall be in accordance with Title 8, CCR, Section 5144.

Fit-testing shall be provided at the time of initial assignment or anticipation of field deployment, annually, and whenever there are changes in the employee's physical condition (e.g. facial scarring, dental changes, cosmetic surgery, and obvious change in body weight) that could affect respirator fit.

Employees who wear corrective glasses or other PPE must ensure that such equipment is worn in a manner that does not interfere with the facepiece seal. The glasses or PPE should be worn during fit-testing.

Respirators used in fit-testing and training shall be cleaned and disinfected before being used by another person.

X. USE OF RESPIRATORS

Respiratory protection should be used when other measures are not able to reduce exposures to acceptable levels. Employees shall use their respirators under conditions specified by this program, in accordance with the training they have received, and when working in field conditions that dictate respiratory protection. Respirators will be selected that are approved for the contaminants that are believed to be present and employees shall not work in atmospheres in which concentrations exceed the maximum use concentration of the respirator. Employees will not remove respirators in hazardous environments, and the respirator shall be used according to NIOSH and the manufacturer's guidelines. Employees must stop working and exit the environment if a change in breathing resistance is noticed or a leak around the facepiece is detected. Employees will leave the work area to wash their face if respirator is causing discomfort or rash, to change filters, cartridges or other parts, or to inspect and replace respirator if it stops functioning properly.

Employees will wear an N95 respirator and follow manufacturer's instructions during any of the following situations:

- When wild smoke conditions are deemed hazardous.
- When responding to a spill of a hazardous substance.

XI. MAINTENANCE AND CARE OF RESPIRATORS

Employees are responsible for cleaning, disinfecting, storing, inspecting and repairing all reusable respirators wherever possible. Employees will request assistance with these tasks as needed.

Reusable respirators maintained for emergency use and issued to more than one employee shall be cleaned and disinfected after each use.

Respirator cleaning procedures recommended by NIOSH are available at http://www.cec.gov/niosh/npptl/cleaning/html or in the Cal/OSHA Respirator Standard.

N95s shall be maintained in their original wrapping and boxes until used. After a single use, N95 respirators will be disposed of in an appropriate manner. N95s are maintenance-free. No repairs shall be attempted. If damaged, soiled, or wet the N95 will be discarded and replaced.

All respirators shall be stored according to the manufacturer's recommendations to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals. They shall be packed or stored to prevent deformation of the facepiece and exhalation valve. Respirators should be stored in the plastic bag provided by the manufacturer.

Bulk storage locations shall be inspected annually for moisture, mold, rodent infestation, or any other situation that puts the integrity of the respirators at risk. All respirators shall be inspected prior to each use. Inspection should include the following:

- Respirator function, tightness of connections, condition of the various parts including, but not limited to, the facepiece, head straps, valves, and cartridges, canisters or filters.
- All rubber or plastic parts for pliability and signs of deterioration. N95 respirator inspection shall include a check of the facepiece and headbands for pliability and signs of deterioration.
- Inspection of N95 respirators that have exhalation valves shall include the exhalation valve. The septum covering the valve inside the respirator shall be inspected to ensure that it covers the valve opening during exhalation. If the septum is self-contained within the valve and unable to be accessed, no attempt should be made to access the septum and no inspection is needed the face seal positive check will identify any damage with the septum if self-contained.

Each inspection shall include donning the respirator and performing positive and negative pressure seal checks. An inspection log shall be kept with each reusable respirator.

Any defective respirators shall be removed from service, and shall be adjusted, repaired or discarded as appropriate. Only persons who have been trained to perform such operations shall make repairs or adjustments to respirators. All repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed, using only the manufacturer's NIOSH-approved parts.

When cartridges are used, the Office of Emergency Services Manager shall determine a cartridge change schedule based on information provided by the employee.

Respirators used in a non-contaminated environment can be disposed of with regular trash. Respirators used in a contaminated environment shall be disposed of in a pre-designated red biohazard container.

XII. TRAINING

A Certified Trainer with oversite from Human Resources or Risk Management shall provide annual training in the content of the Cal/OSHA respiratory protection standard and in the proper use of respirators and their limitations. Training is provided to all affected employees and will include information in the Respirator Training Checklist in <u>Appendix A</u>. Group Training

Records will be maintained on the Form included in <u>Appendix A</u>. Individual Training Records will be maintained using the <u>Respirator Fit Testing Individual Training Record Form.</u>

Remedial training will be provided to any employee when problems with respirator use occur.

Ву		
Richard Kuhns, Pa	sy.D	
County Administr	rative Officer	
Date:		
RATIFIED this Trinity by the following		, 2020 by the Board of Supervisors of the County of
AYES: SI NOES: NO ABSENT: NO ABSTAIN: NO	upervisors one one one one	
		BOBBI CHADWICK, CHAIRMAN Board of Supervisors County of Trinity State of California
ATTEST:		
RICHARD KUHNS, Psy.D Clerk of the Board of Su		
Ву:	Denuty	

Appendix A: Forms

Respiratory Protection Medical Evaluation Form
Respirator Medical Clearance Form
Respirator Fit Testing and Individual Training Record
Respirator Training Checklist
Respiratory Protection Training Record (Group)

TRINITY COUNTY Respiratory Protection Medical Evaluation Form

OSHA Respirator Medical Evalua	tion Ques	tionnaire (Mandatory)			
To the employee: Answers to questi medical examination.	ons in Sec	tion 1 and to question 9 in	section 2 of	part A, d	o not require a
To the employee: Can you read (circ	cle one):			YES	NO
Your employer must allow you to ansthat is convenient to you. To maintai review your answers, and your employerofessional who will review it.	n your con	fidentiality, your employer	r or supervis	or must n	ot look at or
Part A. Section 1. (Mandatory) The selected to use any type of respirator			ided by ever	y employ	ee who has been
1. Today's Date:	2. Your I	Name:			
3. Your age:		4. Sex (circle one):	Male		Female
5. Your height:	Ft.	In.	6. Your wei	ght:	Lbs.
7. Your job title:		1			
8. A phone number where you can be reviews this questionnaire (include A		by the health care profession	onal who		
9. The best time to phone you at this	number:				
10. Has your employer told you how will review this questionnaire (circle		the health care professio	onal who	YES	NO
11. Check the type of respirator you	u will use (you can check more than o	one category	y):	
a N, R, or P disposable respira	atory (filter	-mask, non-cartridge type	only).		
b Other type (for example, habreathing apparatus).	lf- or full-f	acepiece type, powered-air	r purifying,	supplied-a	nir, self-contained
12. Have you worn a respirator (circle one): YES NO					
If "yes," what type(s):					
Part A Section 2. (Mandatory) Que been selected to use any type of respi			wered by ev	ery emplo	oyee who has
1. Do you <i>currently</i> smoke tobacco, o	or have you	smoked tobacco in the las	st month?	YES	NO
2. Have you ever had any of the follo	wing cond	itions:			
a. Seizures				YES	NO
b. Diabetes (sugar disease) YES NO					
c. Allergic reactions that interfe	ere with yo	ur breathing		YES	NO
d. Claustrophobia (fear of closed-in places) YES NO					
e. Trouble smelling odors YES NO					
3. Have you <i>ever had</i> any of the follo	wing pulm	onary 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 <i>currently</i> have any of the following symptoms of pulmonary or lung illness	s?	
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
1. 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 <i>ever had</i> 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 <i>ever had</i> 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 <i>currently</i> 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	YES	NO
8. If you've used a respirator, have you <i>ever had</i> any of the following problems? (If a respirator, check the following space and go to question 9)	f you've never	used
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 facepiece respirator or a self-contained breathing apparatus (SCBA). For employee use other types of respirators, answering these questions is voluntary.		
10. Have you <i>ever lost</i> vision in either eye (temporarily or permanently)?	YES	NO

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 <i>ever had</i> an injury to your ears, including a broken ear drum?	YES	NO
13. Do you <i>currently</i> 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. Difficulty 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
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Part B. Respirator Use Additional Information

- **1. How often are you expected to use the respirator(s)?** Respirator use will be during disasters when hazardous materials and/or infectious agents are present. During such incidents, the respirator may be worn on a daily basis for over 4 hours per day.
- **2. During the period you are using the respirator(s), what is your work effort?** The work effort will be light to moderate. This includes standing, walking on primarily level surfaces, and patient/equipment movement using assistive devices.
- 3. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator? Depending on the incident and the hazardous material/infectious agent, the employee could possibly wear lightweight protective clothing (gown, shoe covers, gloves, etc.) up to and including a full-facepiece respirator with chemical resistant protective clothing (coveralls, boots, gloves, etc.) of a heavier, encapsulated material.

4. Will you be working under hot conditions (temperature exceeding 77 deg. F)? The employee will typically be working in a temperature-controlled building, but there may be instances where the employee will work outside or the A/C is not working properly. Under these circumstances, employees will be encouraged to take frequent breaks in contaminant free zones.
5. Will you be working under humid conditions? Work will be performed inside or outside.
6. Describe the work you'll be doing while you're using your respirator(s):
7. Describe any special conditions you might encounter when you're using your respirator(s):
Medical Provider Contact Information:
Employee Signature Date

TRINITY COUNTY RESPIRATOR MEDICAL CLEARANCE FORM

Part C: Respirator Medical Evaluation Authorization and Approval			
Employee Authorization			
I authorize the Medical Provider to review my respirator medical evaluation questionnaire for approval to wear respirators in the performance of my work duties.			
Employee Name (print):			
Employee Signature:	Date:		
Medical Provider Approval			
I have reviewed the respirator medical evaluation questionnaire for the above employed following types of respirators:	yee and approve the		
Disposable respirator N,R, or P (filter-mask, non-cartridge type only)			
Half-facepiece type powered-air purifying respirator (PAPR)			
Full-facepiece type powered-air purifying respirator (PAPR)			
Medical Provider Name:			
Medical Provider Signature:	Date:		
Instructions:			
Employee: Complete the respirator medical evaluation questionnaire. Sign and date the questionnaire. Provide the questionnaire to the Medical Provider at the designated Medical Facility. Medical Provider: Review the respirator medical evaluation questionnaire and determine whether or not the employee is able to wear the identified respirators. If the employee is not medically able to wear a respirator, draw a line through the type(s) of respirators the employee cannot wear. Return Part C to Human Resources FAX (530) 623-4222 for the employee's record. Either maintain Part A and B in your office or return to the employee. Human Resources/Risk Management: Provide the Office of Emergency Services with Part C: Medical Clearance form for official clearance for the employee to obtain proper fit testing from the Office of Emergency Services Manager and/or Emergency Preparedness Coordinator.			

EXAMPLE

Respirator Fit Testing and Individual Training Record

Date	Employee Name		Employee Number
Make, Model and Style of respirator tested		Disposable N95 P100	Reusable Half face Full face
		Size:	
Type of Fit-testi	ng		
Saccharin	Bitrex	Quantitative*	
Taste of Threshold (if qualitative test): 10 20 30 >30 (cannot taste)			
Results of Fit-testing:			
If Quantitative test performed, attach strip chart or printout of results.			

Certified Fit Tester Signature Date

RETURN TO HUMAN RESOURCES

COPY TO EMPLOYEE AND DEPARTMENT

EXAMPLE

Respirator Training Checklist

Circumstances under which respirators are to be used		
Why respirators are necessary		
Medical and physical conditions that limit or prevent effective use of respirators (dizziness, difficulty breathing, dental work, facial scars, missing dentures, etc.)		
Proper fit checks		
Demonstration of how a respirator is to be worn, how to adjust it, and how to determine if it fits properly.		
Respirator limitations and capabilities in protecting against chemical and/or biological agents		
How to inspect, put on and take off respirators		
How to maintain, clean and store respirators		
Inspection of respirator seals		
What to do when there is a change in type of respiratory protection used or a new hazard or task requiring respirator use is identified		
Decontamination or safe disposal of a contaminated respirator		
Self-decontamination when breakthroughs occur		
How and when to arrange for fit-testing		
Field Deployment considerations with regards to respirators		
Training on specific respirators		

EXAMPLE

Respiratory Protection Training Record (Group)

Department/Branch:		Location:
Date of Training:	_ Course/Topic: _	
Instructor:		
Instructor Qualifications:		

Employee #	Name (Print)	Job Title	Signature
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Appendix B: Contacts

Name	Position	Email	Work phone	Cell phone
Shelly Nelson	HR Director/	snelson@trinitycounty.org	530-623-8376	530-623-0397
•	Risk Manager			
Rebecca	Loss Prevention	bcooper@trinitycounty.org	530-623-8371	530-739-8827
Cooper	Specialist II			
Ed Prestley	Office of	eprestley@trinitycounty.org	530-623-1116	707-330-1323
	Emergency			
	Services			
	Manager			

Appendix C: Types of Respirators and Filters

The atmosphere and the air contaminant level that a person may encounter dictate the type of respirator that must be worn. Respirator types are listed below:

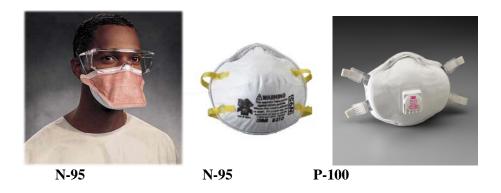
Air-purifying respirator (APR)

The air-purifying respirator passes ambient air through filters, cartridges, or canister to remove gas, vapor, particulate, or combinations of gas, vapors and /or particulate from the air. These devices do not provide oxygen or protect against oxygen-deficient atmospheres.

For protection against chemical gases and vapors, the respirator must be equipped with an ESLI (End of Service Life Indicator) certified by NIOSH for containment.

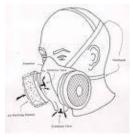
Filter Facepiece (dust mask)

These negative pressure disposable particulate filtering facepieces, type of N, R, or P series have an entire facepiece composed of the filtering medium. These units have no replaceable parts.

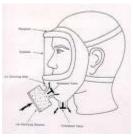


Half Mask or Full Filtering Facepieces

These tight-fitting respirators are non-powered, negative pressure respirators. Ambient air is inhaled through purifying medium replaceable cartridges (filters) and exhaled through an exhaust valve.



Half Mask



Full Facepiece



Full Facepiece

FILTERS FOR AIR PURIFYING RESPIRATORS

To help laboratory employees identify which cartridge is designed for which specific chemical all filters, cartridges, and canisters must be labeled and color-coded with an approval label provided by NIOSH.

Canister or Cartridge

A canister or cartridge is a container with a filter, sorbent, or catalyst, or combination of these items which removes specific chemical contaminants from the air when passed through the container.



Types of Filter

The filter is the component used in respirators to remove solid or liquid aerosols (particles) from inspired air and can also be called an air-purifying element.



There are nine possible classes of filters (three levels of filter efficiency and three levels of resistance to filter efficiency degradation):

Filter Efficiency

Under NIOSH criteria, filter materials are tested at a flow rate of 85 lpm for penetration by particles with a medial aerodynamic diameter of 0.3 um and if certified are placed in one of three categories:

- Type 100 (99.7%) efficient (considered a high efficiency particulate air (HEPA) filter)
- Type 99 (99%) efficient
- Type 95 (95 %) efficient

Filter Resistance Levels

The categories of resistance to filter efficiency degradation:

N (Not resistant to oil)

R (Resistant to oil)

P (Oil proof)

Type 100, 99, and 95 Particulate Filter

N-100, 99 and 95 are effective against particulate aerosols free of oil; time use restrictions may apply. (a single shift time limitation may be appropriate) N-series filters should be restricted to use in those workplaces free of oil or other severely degrading aerosols.

P-100, 99, and 95 are effective against all particulate aerosols and P-100 is the only filter that is color coded magenta (P series filters have neither aerosol-use nor time-use limitations.

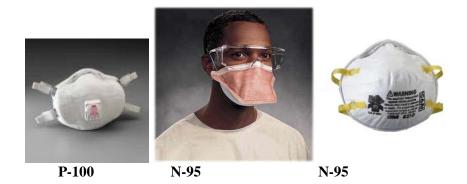
R-100, 99 and 95 are effective against all particulate aerosols, time use restrictions may apply (R series filters do not have similar aerosol-use restrictions).

As for any filter, service time will be limited by considerations of hygiene and increased breathing resistance due to filter loading.

Examples of Particulate Filters



HEPA Filter HEPA Filter N-100



Use of Filter

Filter use and limitations should be clearly marked on the filter, filter package, or respirator box.

Dispose all filters according to manufacturer's guidelines.

Appendix D: Designated Positions by Department

DEPARTMENTS	ENVIRONMENTAL HEALTH	SHERIFF	
ADMINISTRATION	Environmental Health Director	All Sworn Staff	
N/A	Environmental Health Specialist I/II	Animal Control Officer	
AG COMMISSIONER	GENERAL SERVICES	SOLID WASTE	
N/A	Facility Operations Superintendent	Gate Attendant I/II	
ASSESSOR/CLERK RECORDER/ELECTIONS	Maintenance Mechanic I/II	Equipment Operator Driver I/II/III	
N/A	HEALTH & HUMAN SERVICES	Technician I/II/III	
AUDITOR	Social Worker I/II/III	TREASURER/TAX COLLECTOR	
N/A	Social Worker Supervisors	N/A	
BEHAVIORAL HEALTH SERVICES	Custodian/ Maintenance Worker	TRINITY TRANSIT	
Case Managers	Work Crew Leader	Transit Drivers	
Clinicians	Public Health Nurse I/II	<u>VETERANS SERVICES</u>	
BOARD OF SUPERVISORS	Public Health Nurse Supervisor	Veterans Service Officer	
N/A	Public Health Nurse Director		
BUILDING & DEVELOPMENT SERVICES	HUMAN RESOURCES		
Building Inspector, I/II/III Chief Building Inspector	N/A		
CANNABIS	INFORMATION TECHNOLOGY		
Code Compliance Lead Worker Code Compliance Specialist I/II	N/A		
CHILD SUPPORT SERVICES	LIBRARY		
N/A	N/A		
DEPARTMENT OF TRANSPORTATION	PLANNING		
Mechanic I, II, III	N/A		
Road Maintenance Worker I, II, III	PROBATION		
Road Superintendent Director of Transportation	Assistant Chief Probation Officer Chief Probation Officer Deputy Probation Officers		
Equipment Shop Supervisor	RISK MANAGEMENT		
Surveyor	Risk Manager		
DISTRICT ATTORNEY	Loss Prevention Specialist I/II		
N/A			