

Responder Safety and Health Plan



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1. Purpose

The purpose of the Alabama Department of Public Health (ADPH) Responder Safety and Health plan is to identify potential hazards and mitigation factors for employees being deployed during an emergency.

2. Scope & application

ADPH is responsible for the development, maintenance and application of this document. The policies, processes and procedures described in this plan are intended to apply to ADPH employees and volunteers working under the oversight of the ADPH Operations Center (OPS) during an emergency or disaster response, including assignment to field operations or to office-based support of the event. It applies to the entire state however, it is not intended to replace or supersede safety procedures of other responding agencies, local, state or federal, which are not under the oversight of ADPH (OPS or ICS). If situations arise in which joint response with other agencies is required in which conflicts in safety procedures arise, these issues are to be referred back to ADPH (OPS or ICS) for resolution.

It is expected that the safety procedures described in this plan, reflect, to the degree possible, non-disaster procedures in which some staff are already trained, recognizing that greater caution or additional attention to safety may be needed in some disaster settings. ADPH employees may respond to a disaster but they are not first responders, therefore they will not knowingly be deployed into an environment that is dangerous nor will they be expected to perform tasks that they have not been trained to accomplish.

This plan is not intended to prescribe safety procedures during non-disaster periods other than the immediate pre-disaster period during which an anticipated disaster is prepared for, and during the recovery phase immediately post disaster. These are periods in which ADPH (OPS or ICS) is expected to be operational. In addition, some parts of this plan may guide longer term safety response than is required to ensure the health of ADPH responders.

CEP lacks direct authority to establish or edit safety policies used on a daily basis by other parts of this agency; however, the authority of the Incident Commander or Safety Officer of ADPH (OPS OR ICS) during the disaster takes precedence over usual procedures. This document is intended to guide, not limit, the actions of the Incident Commander and Safety Officer in ensuring the health and safety of responders.

3. ICS Structure/ADPH Staff

ICS has oversight authority for emergency event.

4. Responsibilities

- Bureau Directors/CEP/Local Health Department responsibilities
 - Provide applicable safety and health training for employees and volunteers
 - Provide PPE – identified risk, training, use, care of – administrative controls
 - Provide recommendations for follow up monitoring, if indicated
 - Provide information on how to report an injury/exposure
- Employee/Responder responsibilities
 - Attend applicable safety and health training
 - Use PPE as directed
 - Follow safety procedures
 - Bring issues/concerns/questions/conflicts to attention of Safety Officer (ICS OPS)
 - Report exposures/injuries as directed
 - Bring 'go kit' items - clothing , nutrition, hydration, hygiene, and health maintenance

5. Responder Health and Safety

ADPH is committed to serving the citizens of Alabama therefore it is critical that those responding on behalf of the department work safely and risks to their health be minimized, as much as possible, even during a disaster response to ensure this commitments. ADPH has developed District and Central office response teams. The District Administrator and Clinical Nursing Director will determine which staff members will deploy, depending on the request. Bureau Directors will determine which staff will deploy for Central office staff teams excluding discipline specific. Deployment will be coordinated through ICS.

6. Risk Reduction – Pre-deployment

Related Training Links for responders - In general responders should have a basic familiarity safety awareness, safety and health, terminology, communications.

Responder Training Links		
Category	Topic	Related Training Links
SAFETY AWARENESS	Driving Hazard Awareness	https://www.cdc.gov/niosh/motorvehicle/
	Safety Matters	https://www.cdc.gov/niosh/topics/safetymatters/default.html
	Personal Protective Equipment	https://www.cdc.gov/niosh/az/p.html .
	Respirators	https://www.cdc.gov/niosh/topics/respirators/ https://www.cdc.gov/niosh/npptl/
CDC Workplace Safety and Health Topics A-Z	<i>Physical Hazards</i> (H) Heat Stress (C) Cold Stress (S) Sun Exposure <i>Biological Hazards</i> (I) Insects and Scorpions (P) Poisonous Plants (V) Venomous Spiders (V) Venomous Snakes <i>Vector-Borne Diseases</i> (M) Mosquito-Borne Diseases (T) Tick-Borne Diseases (L) Lyme Disease	https://www.cdc.gov/niosh/topics/
	(S) Stress	https://www.cdc.gov/niosh/topics/stress/
	Training on Shift Work and Long Work Hours	https://www.cdc.gov/niosh/docs/2015-115/default.html
Natural Disaster/Extreme Weather Topics	- Tornado - Flood - Heat Stress - Cold Stress	https://www.cdc.gov/niosh/topics/emres/natural.html
	2017 Hurricane Key Messages	https://www.cdc.gov/disasters/2017_hurricane_keymessages/docs/CDC-Hurricane-Key-Messages.pdf
BLOODBORNE INFECTIOUS DISEASES: HIV/AIDS, HEPATITIS B, HEPATITIS C	Universal Precautions For Preventing transmission of Blood borne infections	https://www.cdc.gov/niosh/topics/bbp/universal.html

7. Onsite Response

Procedures and process for site specific briefing and training:

- Orientation to worker identification/badging and worker rostering
- Site-specific safety and health training
- Work schedule and work rest practices
- Site-specific risk management and communication practices
- Site-specific information on first aid and other medical or mental health services
- Psychological support resources
- Infection control practices
- Disaster buddy training
- Medical (injury or illness) follow-up procedures
- Knowledge on how to obtain PPE supplies
- Knowledge on how to obtain environmental testing equipment & resupply
- PPE equipment selection, testing, use, maintenance, and disposal awareness training
- Personal exposure monitoring and equipment
- Decontamination practices

Communication procedures

The appointed communication official will work closely with the designated Safety Officer for CEP to disseminate responder safety and health information before, during and after a public health event or emergency.

Prior to responding to a public health event or emergency, the Safety Officer or designated official, will brief responders on incident-specific safety information and communication procedures during the response. Responders will be informed of instructions and procedures to report exposures, injuries, and other incidents. The Safety Officer or designated official will provide periodic up-to-date information on potential health threats, hazardous exposures, health monitoring data, and recommendations related to the safety and health of responders to ADPH officials and responders, and during an activated emergency to appropriate officials within and outside the ICS.

All communication and information collected must maintain information security and confidentiality procedures as required by applicable laws and agency policies.

8. After-Action Assessment

- Responders debriefing
- Event analysis
 - Identification of things that worked well and problems observed
 - Suggestions on correction of identified problems for future events
- Implementation of lessons learned in current plan and/or policies

9. Other considerations

- Liability - Responders will be briefed at the time of deployment on the extent and limitations of liability protection and redress for injury.
- Workers compensation - State of Alabama Employee Injury Compensation Trust Fund will provide workers compensation coverage to ADHP employees deployed under the authority of ADPH. This may include person who are not employees of the agency and not normally covered by workers compensation by the agency.

In the event that a responder is injured or even potentially exposed to environmental condition which may result in later adverse health outcomes, the responder must notify their supervisor immediately.

10. Appendices

EMPLOYEE EMERGENCY RESPONSE

RESPONDER HEALTH AND SAFETY



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Introduction

Since its inception, the Alabama Department of Public Health (ADPH) has worked diligently to achieve its mission of serving the people of Alabama by assuring conditions in which they can be healthy. Nothing is more important to this mission than providing assistance during times of disaster. This booklet is intended to provide information to our employees about the overall emergency response by the department and the responsibilities that they have in this effort.

Unless the emergency calls for it, most employees will not have to respond directly and will be expected to maintain normal work hours and responsibilities. When activated, employees are required to participate in the response effort; however, our employees will not be put into situations of unreasonable danger, nor will they be expected to perform tasks that they have not been trained to accomplish.

It has been said that emergencies are local, meaning the response to a disaster should begin at the local level. When the scope of the disaster requires more resources, the department's Incident Command System (ICS) will be activated. This is a structured and orderly system in which each supervisor has a limited span of control and each employee reports to one supervisor. The assigned tasks and supervisor may be different from that of day-to-day operations. When ICS has been activated, there is an Incident Commander who is responsible for the direction of disaster response that flows through four sections: Planning, Operations, Logistics, and Finance. To prepare for ICS activation, each employee must complete National Incident Management System (NIMS) courses IS100 and IS700. These courses are available through the department's Learning Content Management System. Additional NIMS courses may be required according to task assignment.

Response Opportunities

According to the Emergency Support Functions (ESF) of the Federal Emergency Management Agency and the State Emergency Operations Plan, the department has been identified as the agency responsible for public health and medical services, including Medical Needs Shelters (MNS) under ESF 8. For this reason, deployment to an MNS is the primary opportunity for our staff. The following defines the types of response that may take place during an emergency. Our staff is not expected to participate in all of them, but needs to be familiar with the terminology, depending on the type of response and the type of disaster.

Medical Needs Shelter

An MNS is defined as a shelter of last resort during emergency situations for persons with conditions requiring minimal nursing oversight who cannot be accommodated in a Mass Care Shelter (MCS). Its mission is to provide services during an emergency in an environment that can help individuals to sustain pre-disaster levels of health. The MNS is housed in a secure facility with sustainable power, water, sanitation, and limited food service. Departmental staff will provide medical oversight in conjunction with the shelteree's caregiver. Deployment is usually a week at a time, including a day of travel to and from the site.

Mass Care Shelter

An MCS is a shelter of last resort for people displaced in an emergency. Providing mass care in times of crisis is deemed an ESF 6 responsibility assigned to agencies other than the department. Participation by our staff in an MCS with no medical oversight is limited to once-daily rounds to determine if people who may be ill or require care that cannot be provided in an MCS need to be transferred to an MNS or other facility. Environmentalists will also be asked to assess this type of shelter. The department does not provide medical equipment or supplies to MCS. MCS and MNS that are located in the same facility are operated as separate shelters.

Point of Dispensing

A Point of Dispensing (POD) location is a place where needed medications are administered or dispensed to members of the general public in response to an exposure to a chemical or biological agent. The POD is a part of the Strategic National Stockpile (SNS), a national storehouse of life-saving medicine and medical supplies that may be needed during a national emergency. Our staff with, volunteers from the community, will work in PODs to distribute needed medication or supplies.

Out-of-State Response

A large scale disaster may require another state to ask for assistance. For this reason, the Emergency Management Assistance Compact (EMAC) was established to offer support during a state of emergency declared by a governor. Whether the disaster is natural or man-made, EMAC provides a responsive and straightforward system for states to send personnel and equipment to help disaster relief efforts in other states. Should another state in our region request assistance, you may be asked to join a team for a 14 day deployment.

Expanded Radiological Emergency Response Team

The Office of Radiation Control is located in the central office in Montgomery so it would take several hours for staff to respond to an incident; therefore, two environmentalists and two nurses from each Public Health Area are assigned as members of the Expanded Radiological Emergency Response Team (ERERT). This team was formed to provide a rapid response to assist in detecting and measuring radiation and to ensure the public is protected from excess exposure.

Unknown Substance Response

An unknown substance may be biological or chemical and take the form of a solid, liquid, or gas. Should there be an unknown substance incident in the state, the Bureau of Clinical Laboratories (BCL) will be responsible for confirmatory identification. During events involving unknown substances and other cases related to potential nuclear, chemical or biological terrorism agents, as well as non-terrorist related chemical releases, the Center for Emergency Preparedness (CEP) will respond and work with the Epidemiology Division (EPI), BCL, Radiation Control, US Post Office, Federal Bureau of Investigation (FBI), Public Safety, and other entities as necessary while EPI conducts a parallel notifiable disease/condition investigation.

Epidemiology Teams

Epidemiology teams may be deployed to conduct surveys, recovery assessments, and data analysis as needed. They may also be able to conduct phone interviews which would reduce potential risk such as violence, respiratory exposure, heat or cold exposure, and travel.

Medical Needs Shelter Advance Teams and Logistics Teams

These teams will be composed of nurses, clerical staff, and other staff members who will deliver trailers that hold supplies necessary for the response. They will be responsible for setting up the shelter or station prior to staff arrival and demobilization of the shelter after it is closed.

Personnel Roles During a Response

The following are examples of how the department's personnel may be used in shelter situations:

Nurses

Should an MNS be activated, nurses will serve in several roles. The nurse may manage the shelter or be a charge or staff nurse on a shift. The nurse may also be called to dispense or administer medication in a POD.

Care Assistants

Clinic and home health aides will be classified as Care Assistants and will provide assistive and personal care in an MNS along with the caregiver.

Clerical Support

Clerical Support personnel will provide administrative assistance to other staff in the shelter. This includes data entry into the Alabama Incident Management System which includes the Patient Tracking System and ensuring that it is updated as shelterees are admitted, transferred, or discharged. Clerical support will also maintain shelteree medical records.

Social Workers

Social workers will assist with all aspects of the shelter during activation, operations, and demobilization and begin discharge planning as soon as possible after the shelteree is admitted.

Safety Officer

One team member will be assigned to serve as the Safety Officer. This person will work with a person assigned to provide security by the faculty or the Alabama Emergency Management Agency to ensure that the setup and operations of the shelter are conducted in the safest manner possible. The Safety Officer will work with the Facility Manager and the Nurse Manager to ensure that aisles, entrances, and exits are free of obstructions or tripping hazards. This staff member should have knowledge of the use of safety and emergency equipment.

Team Support Officer

One person on each team will be designated as the Team Support Officer. While this person is mainly responsible for taking care of the needs of the team during their deployment, allowing them to focus on patient care activities, the Team Support Officer will also assist with general shelter functions and reports to the Nurse Manager.

Environmentalist

During an emergency, Environmentalists may respond by assessing sanitary conditions and assessing conditions related to food preparation, storage, and handling. They may also assess vector control, solid waste issues, and assess for potable water. An Environmentalist may also function as a Team Support Officer or the Safety Officer. In a shelter, the Environmentalist will report to the Safety Officer.

Disease Intervention Specialist

The Disease Intervention Specialist will participate in disease surveillance activities and may also function as a Team Support Officer or the Safety Officer.

Nutritionist

The Nutritionist will function as a consultant to shelter operations for special dietary needs of shelterees and may also function as a Team Support Officer or the Safety Officer.

Volunteers

Volunteers are an essential part of emergency response. The department is a committed partner with community volunteer groups and agencies throughout the state; therefore, it is important for staff to be familiar with groups in their area. The American Red Cross may assist with mass care under ESF 6. The Community Emergency Response Team (CERT) and the Salvation Army are two other common volunteer organizations that will be present during disasters. The Medical Reserve Corps (MRC) is comprised of organized medical and public health professionals who assist communities nationwide during emergencies and in ongoing efforts in public health.

Emergency System for Advance Registration of Volunteer Health Professionals

The Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) Program is a U.S. Department of Health and Human Services initiative for state development of a standardized database of healthcare personnel who volunteer to provide aid in an emergency. The guidelines for systems are to include verifiable and up-to-date information regarding the volunteer's identity, licensure, credentialing, and accreditation and privileging, in hospitals and other medical facilities. This secure system gives each state the ability to quickly identify and better utilize health professional volunteers during emergencies and disasters. The goal of the ESAR-VHP Program is to eliminate critical problems encountered when utilizing volunteers.

As part of professional credentialing and certification, people who volunteer with ADPH are required to register in the ESAR-VHP database for the state of Alabama, known as ALResponds. ALResponds is a web-based volunteer registry that contains a list of community members and health professionals that have pre-registered as volunteers to assist during disasters. Pre-registration allows the volunteer to indicate their abilities, interests, and other deployment commitments. This pre-registration in turn allows the department to verify a volunteer's credentials and medical privileges in advance of an event and to identify volunteers that match the skill level requirements of a request from the local, county, state, or federal level.

Potential Hazards for Deployed Individuals or Teams

It is critical that all employees be alert to safety issues and potential health hazards during day to day operations, but, even more so during a disaster. Employees may encounter various hazards during the response. The information below includes potential hazards and information on ways to lessen risks. The list is not all-encompassing but based on common types of response during an emergency or disaster.

I. Travel Hazards

- A. Whether traveling alone or as a team, safety should always be priority.
- B. Seat belts are required and are the single most effective safety device for preventing injury and death.
- C. Drivers should drive defensively.
- D. Drivers should not text, check e-mails, or talk on the cell phone.
- E. If road conditions are not safe for travel, take appropriate actions including alerting the appropriate point of contact to unsafe conditions. Unsafe conditions would include but are not limited to:
 - 1. Downed power lines (treat all as if they are live).
 - 2. Downed trees.
 - 3. Water across the road way (Turn Around, Don't Drown! ®).
 - 4. Workers clearing debris or construction zones.
 - 5. Snow or ice.

II. Strains or Sprains

- A. Working in an uncommon environment with more or different physical requirements than usual day to day work may place an employee at risk for a strain or sprain. Other potential factors for a strain or sprain could be attributed to:
 - 1. Poor physical condition.
 - 2. Muscle fatigue.
 - 3. Awkward posture.
 - 4. Repetitive motion.

B. To prevent strains/sprains, employees are encouraged to:

1. Stay in good physical condition.
2. Warm up with gentle stretching before physical activity.
3. Use good body mechanics when bending or lifting.
4. Ask for assistance when lifting large or heavy objects.
5. Maintain adequate aisle space and clear walkways to avoid tripping.
6. Have sufficient help if assisting mobility challenged shelterees.
7. Take frequent rest breaks when performing repetitive motions.

III. Environmental Exposures

Humans are not the only ones affected by disasters. Employees should be aware of their surroundings at all times and are particularly encouraged to watch for the following:

- A. **Mosquitoes:** Employees are encouraged to use mosquito repellent as directed when working in areas where mosquitoes are present. Anti-itch or sting ease aids may provide some relief of symptoms if bites occur. Light colored and long sleeves/pants will also provide some protection against bites.
- B. **Snakes:** Avoid them. Remember, snakes can be displaced from their usual surroundings and they may be in unexpected places. If bitten, seek medical attention immediately.
- C. **Animals:** Pets are often friendly to strangers, but, in a disaster setting they may be fearful or hurt. Precautions should be taken around unfamiliar domesticated animals. Call local animal control if you see an injured or stray animal. Wildlife should be avoided since certain animals carry disease.
- D. **Plants:** Poison ivy and poison oak are plants that are known to cause a rash when people who are sensitive to them come into contact with the plant. Some people are so sensitive to the plant that when exposed, they require medical treatment to control the symptoms. When responding to a disaster, precautions should be taken to reduce direct exposure to plants by wearing long sleeves, long pants, gloves, and /or a protective skin barrier. These measures may also protect against tick bites.
- E. **Heat stress:** Employees working in a disaster environment which may be warmer than what they are acclimated to could lead to a heat related illness such as heat stress/cramps, heat exhaustion, or heat stroke. Preventative measures for a heat related illness include:

1. Wear lightweight, light colored, loose fitting clothing.
2. Avoid caffeine and alcohol which may lead to dehydration.
3. Drink plenty of fluids.
4. Do not wait until you are thirsty to drink.
5. Take frequent breaks.
6. Work in the shade when possible.
7. Be alert to signs and symptoms of a heat related illness (headache, thirst, muscle cramps, dizziness, confusion, nausea, hot dry skin, etc.) and seek help as indicated.
8. If taking medication, be aware of the potential side effects as some medications may cause a person to be more susceptible to heat related illnesses.

F. **Sunburn:** Employees working outside may be at risk for sunburn.

Ultraviolet (UV) rays are most intense during the hours of 10:00 a.m. and 4:00 p.m. The best protection against harmful UV rays is long-sleeved shirts and long pants, hats with a large brim, and sunglasses. Sunscreen with Sun Protection Factor (SPF) of 30 or higher should be applied 20 or 30 minutes prior to going outdoors and reapplied every two hours when in the sun. Sunglasses with UV protection are recommended.

G. **Cold stress:** While we are generally known for the extreme heat and humidity in the South, we cannot ignore the potential for hypothermia. Wearing multiple layers of clothing will help keep in body heat. Physical activity will help raise body temperature. Early signs of hypothermia include shivering, fatigue, loss of coordination, confusion, and disorientation. If not corrected, the situation could lead to a life-threatening condition.

H. **Violence:** During times of crisis, increased stress may cause those with poor coping skills or cognitive disorders to act out. People may feel overwhelmed and exhibit inappropriate or violent behavior. There is no one action to prevent violence, so employees should be on alert to factors that could lead to violence and intervene as appropriate. Employees should:

1. Work in teams when possible.
2. Try to diffuse an escalating situation.
3. Do not argue with an upset individual.
4. Call for security or law enforcement, if needed.
5. Leave the situation (area) if possible.
6. Maintain access to exits.

- I. **Stress:** The department has provided Psychological First Aid training to many staff members so they can help identify those who just need to talk from those who may need a behavioral/mental health referral. Staff members working in shelters should maintain good communication among the team about any concerns they have about shelterees or their caregivers.

Some people like to work in a disaster setting and they thrive in that environment while others do not do well in high stress situations. Staff is reminded to take care of themselves and to watch for signs of stress in team members. Staff should recognize that stress can affect a person physically, cognitively, emotionally, and behaviorally. Stress should not be ignored. Suggested ways of dealing with stress include:

1. Talk to someone supportive.
2. Use relaxation techniques (deep breathing, meditation, or write in a journal, etc.).
3. Get rest when possible.
4. Accept what you cannot change.

Once the deployment is over, employees should try to return to their routines as soon as possible. Good nutrition, exercise, and avoiding excessive use of medication or alcohol are encouraged. If an employee is concerned that he/she needs assistance after a deployment, they should contact their supervisor.

- J. **Sanitation and infection prevention:** Steps should be taken to reduce the risk of contamination or infection which include:

1. Wash your hands frequently with soap and water.
2. Use hand sanitizers often if soap and water are not available.
3. Exercise good housekeeping measures.
4. Only drink from proven potable water sources.
5. Ensure proper food temperatures are maintained.
6. Do not eat or drink food or water that may be contaminated.
7. Cover your cough.

- K. Bloodborne pathogens:** Healthcare professionals are at risk of potential exposure of blood and body fluids when providing care. Basic precautions such as gloves and eye or face protection should be used. Needle sticks may pose a risk of injury in an MNS so sharps containers should be available. If an exposure occurs, the employee should notify the Nurse Manager and follow up appropriately.
- L. Respiratory hazards:** This may include exposure to infected persons (biological) or environmental hazards. Unless a respirator (mask) is worn appropriately and used for the correct sized/type particulate it will not provide proper protection. The department provides respirators with 95 percent filter protection against particulates. Each employee who may be affected by respiratory hazards should be fit tested for the appropriate size.
- M. Radiological hazards:** Only trained response personnel will participate in the assessment of radiological conditions and provide initial assistance in the resolution of radiological hazards. The Office of Radiation Control will provide appropriate personal protective equipment, supplies, and equipment needed for a safe response.
- N. Slips, trips, or falls:** Each MNS has an appointed Safety Officer to address overall shelter safety, but, each staff member has a duty to maintain as safe an environment as possible. Slips, trips, or falls can be avoided with appropriate preventive actions:
1. Maintain clear walkways.
 2. Remove debris.
 3. Clean all spills immediately.
 4. Avoid running cords or cables across walkways. When unable to do so, cover cables or cords to eliminate the hazard.
 5. Ensure adequate lighting in the area.
 6. Remove trip hazards.
 7. Get sufficient help if assisting a mobility challenged shelteree with ambulation.
 8. Use good body mechanics when moving supplies and/or setting up cots.

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Alabama Department of Public Health (ADPH) Respiratory Protection Program



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**Alabama Department of Public Health (ADPH) Staff
And ADPH Volunteers
Respiratory Protection Program**

Goal

To ensure that ADPH response staff has appropriate respiratory training and personal protective equipment (PPE) to safely respond during or after a disaster.

Purpose

The Respiratory Protection Program is not intended to supersede any day to day operational program(s) that are already in place. It is meant to align with other safety programs such as Hazard Communication and Blood Borne Pathogens. Respiratory protection will be accomplished as far as feasible by accepted engineering control measures (for example, isolation, or negative/positive) or administrative measures (temporary reassignment) when possible. When effective engineering and/or administrative controls are not feasible, sufficient, or while they are being instituted, appropriate respirators, along with other infection control measures, will be used.

ADPH employees are not First Responders, meaning they will not be asked to go into situations of unreasonable danger. ADPH's emergency response typically includes: establishing and operating Medical Needs Shelters (MNSs) and Points of Dispensing (PODs), and supporting Mass Care Shelters. ADPH will provide PPE personal protective equipment for staff when engineering and administrative controls do not eliminate potential hazards. The staff is not expected, nor should they respond to a level higher than their PPE can provide protection. Assessments by subject matter experts (SME) have been conducted to determine appropriate PPE based on the risk/hazards for deployment.

ADPH has purchased and will provide N-95 respirators at no cost to employees when respirator use is indicated. An N-95 respirator is a negative pressure respirator in that the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator. Respirators provided will be applicable and suitable for the intended purpose. Respiratory protection recommendations and requirements will be coordinated by the Program Administrator in consultation with SME(s) for the event.

Written procedures have been established for the respiratory protection program. The program will be updated as necessary to reflect changes in conditions that affect respirator use. The following provisions are included in the program:

- program responsibilities;
- definitions;
- procedures for selecting respirators;
- medical evaluations/determination for required respirator use;

- fit testing procedures;
- proper use, storage, and inspection;
- discarding;
- training;
- evaluating the effectiveness of the program.

ADPH response will embrace the National Response Framework (NRF) and the National Incident Management System (NIMS).

Responsibilities

The Program Administrator's responsibilities include:

- consult with the appropriate SME and Safety Officer, as indicated, regarding the concentration or type of airborne contaminant(s) in the area to ensure that the proper type of respirator is used;
- work with ADPH Incident Command to ensure that ADPH employees are not deployed into areas where respiratory contaminants have not been considered/evaluated as hazards,
- maintain records in a manner that documents the respirator program and allows for the evaluation of the program's effectiveness;
- ensure training is provided to ADPH employees on the respiratory program, respirator use, selection, storage, fitting, limitations, disposal and responsibilities;
- evaluate the respiratory protection program's effectiveness annually and update as needed;
- work with SMEs to identify work areas, processes or tasks that require personnel to wear personal protective equipment;
- arrange and/or conduct train the trainer training for designated staff including but not limited to: district clinic directors, emergency preparedness nurses, education nurses and environmentalist; and
- maintain records required by the program;
- communicate with district clinic director and employee when employee is not cleared to use an N95
- receive N95 clearance reports from provider and communicate with district clinic directors for needed follow up;
- request grant funding for program sustainment;
- manage all aspects of program including request for proposal, contract with provider, approving invoices, etc.

District clinic director responsibilities include:

- inform the Program Administrator of any new employee to be admitted to the respiratory program (i.e., response team members);

- provide guidance and/or instruction to employees as needed;
- refer any employee to the Program Administrator who reports medical signs or symptoms that are related to ability to use a respirator or indicates a need for further evaluation;
- ensure fit testing is conducted as required;
- monitor respirator use to ensure compliance;
- ensure employees to be included in the respiratory program receive respiratory training, a screening questionnaire, and an initial and annual fit test;
- be aware of tasks requiring the use of respiratory protection;
- enforce the proper use of respiratory protection when necessary;
- coordinate with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.

Employee responsibilities include:

- follow policies and procedures pertaining to respirator use;
- wear, care for, store and maintain respirators according to policy and manufacturer's instructions;
- inspect respirators before use for signs of wear or need for replacement;
- conduct user seal checks before each use;
- report any complications with respirator use, or health problems that may interfere with the safe use of a respirator;
- maintain clean shaven status;
- use respirator only within its limitations and manufacturer's recommendations;
- ensure that other PPE used is worn in a manner that does not interfere with the respirator seal.

Definitions

The following definitions are important terms used in this respiratory protection standard in this section.

ADPH Volunteer is a licensed medical and/or health care volunteer that will assist with clinical needs and provide surge capacity for public health emergencies. Volunteers may be used during disasters.

Employee exposure means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

Fit test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. [See also Qualitative fit test (QLFT)]

Negative pressure respirator means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Personal Protective Equipment (PPE) means specialized clothing or equipment, worn for protection against infectious materials.

Physician or other licensed healthcare professional (PLHCP) means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required for this program.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Qualitative fit test (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Respirator is device designed to protect the wearer from inhaling harmful dusts, fumes, vapors, and/or gases. There are two main categories: the *air-purifying respirator*, which forces contaminated air through a filtering element, and the *air-supplied respirator*, in which an alternate supply of fresh air is delivered. **ADPH has purchased air-purifying (N-95) respirators.**

Subject Matter Expert (SME) means a person who is an expert in a particular area.

Surgical mask means a barrier worn over the nose and mouth that provides some protection from droplets; it is not a respirator.

User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

Voluntary use is when an employee requests to use a respirator even though one is not required. Voluntary use will be permitted but all activities of the program must be followed. Should the PLHCP determine that additional testing is needed to determine safe respirator use the employee will be required to follow up with his/her physician to obtain a clearance. The department is not responsible for this cost.

When respirators are required

ADPH employees are typically deployed to medical shelters, to provide vaccines after a disaster, or to points of dispensing. But, depending on the circumstances, response may be in county health departments during daily operations. None of these situations would include an oxygen-deficient atmosphere; therefore air-supplying respirators will not be required.

When the Program Administrator and SME(s) identify that an N-95 respirator is required, ADPH employees will be added to the respiratory program. Should other types of respirators be required the Program Administrator in consultation with SME(s) will make respirator recommendations and provide alternative measures to implement until the recommendations can be implemented. Voluntary use of N-95 respirators will be allowed.

Selection of respirators

ADPH has purchased and stockpiled a variety of brands and sizes of National Institute of Occupational Safety and Health (NIOSH) approved N-95 respirators.

The respirator selected will be appropriate for the chemical state and physical form of the contaminant. The respirators are disposable and should be changed if damage, distortion, potential contamination occurs, if a proper fit cannot be maintained, if breathing becomes difficult, or as recommended by the Program Administrator or SME.

Screening questionnaire

Before an employee wears a respirator, even for voluntary use, a screening questionnaire should be completed and submitted for review by a PLHCP. The questionnaire is a screening tool to identify those who may have a medical condition or issue that could interfere with the safe use of a respirator.

The Program Administrator will work with the PLHCP to develop a secure, private mechanism for employees to confidentially complete and submit the required medical questionnaire. The PLHCP will review the questionnaire and submit a recommendation for N95 use and/or limitations.

Administration of the medical questionnaire and examinations

The medical questionnaire will be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire will be administered in a manner that ensures that the employee understands its content. (Appendix A)

Written recommendations

A written recommendation regarding the employee's ability to use the respirator will be obtained from PLHCP. The recommendation will provide only the following information:

- whether the employee is cleared or not cleared to wear a respirator; and
- any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used. (Appendix B)

Basic follow-up

Employees in the respiratory program will complete a screening questionnaire initially before use and as required by the Program Administrator.

Medical examination

If the PLHCP determines the employee cannot safely wear a respirator from the questionnaire review, the Program Administrator will inform the employee with the appropriate District Clinical Director or District Administrator. A consultation with Human Resources and the Office of General Counsel may be warranted if the employee's daily duties require N95 use. ADPH does not provide additional testing/follow up if an employee is determined cleared to wear a respirator from the questionnaire review.

Fit testing

Before an employee may use any respirator with a tight-fitting facepiece, the employee will be fit tested with the same make, model, style, and size of respirator that will be used. The following procedures will be used.

- Before an employee can use a tight-fitting facepiece respirator an appropriate qualitative fit test (QLFT) must be passed.
- Fit tests will be conducted prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter.
- The Program Administrator or designee will conduct an additional fit test whenever the employee reports, or the supervisor, or Program Administrator makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
- If after passing a QLFT, the employee or volunteer subsequently notifies the fit tester, supervisor or Program Administrator that the fit of the respirator is unacceptable, the employee will be given a reasonable opportunity to select a different respirator facepiece and to be retested.
- The fit test will be administered using an OSHA-accepted QLFT protocol. (Appendix C)
- Employees with facial hair that interferes with the fit of the respirator will not be fit tested.

(Other than Bureau of Clinical Lab staff, no tight-fitting atmosphere-supplying respirators or tight-fitting powered air-purifying respirators (PAPRs) are used by ADPH employees or volunteers.)

VOLUNTEERS

ADPH may deploy volunteers during an emergency or a public health emergency. The health and safety of volunteers is very important and volunteers will follow the same requirements as ADPH staff. Volunteers asked to deploy into areas where an N95 respirator is required must provide documentation from their physician indicating they are medically able to wear a respirator. Just in time training and fit testing will be conducted as needed. If possible, ADPH may amend contract with its current provider assessing ADPH employees to include volunteer questionnaire review.

N-95 Sensitivity and Fit Testing Procedures

Sensitivity and fit testing for ADPH employees (and volunteers, if needed) will follow QLFT procedures using Bitrex (bitter) or Saccharin (sweet) solutions as referenced in Appendix C

1. A respirator will be chosen for use that correctly fits the user and is appropriate for the assigned task.
2. Prior to the fit process, the test subject will be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit.
3. Assessment of comfort will include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:
 - (a) Position of the mask on the nose;
 - (b) Room for eye protection;
 - (c) Room to talk; and
 - (d) Position of mask on face and cheeks.
4. The following criteria will be used to help determine the adequacy of the respirator fit:
 - (a) Chin properly placed;
 - (b) Adequate strap tension, not overly tightened;
 - (c) Fit across nose bridge;
 - (d) Respirator of proper size to span distance from nose to chin; and
 - (e) Tendency of respirator to slip.
5. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks. Before conducting the negative and positive pressure checks, the subject will be told to seat the mask on the face by moving the head from side-to-side

and up and down slowly while taking in a few slow deep breaths. Another facepiece will be selected and retested if the test subject fails the user seal check tests.

6. **The test will not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache, or sideburns which cross the respirator sealing surface.** Any type of apparel which interferes with a satisfactory fit will be altered or removed.
7. If a test subject exhibits difficulty in breathing during the tests, the test should be halted and she/he will be referred to a physician, as appropriate. The Program Administrator should be contacted immediately should there be a medical emergency.
8. If the employee finds the fit of the respirator unacceptable, another type respirator may be used and re-tested.
9. Prior to the commencement of the fit test, the test subject will be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing.
10. The fit test may be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.

Fit testing documentation

A record of the qualitative fit tests administered to an employee or volunteer will be maintained, it will include the following: (Appendix D)

- name of the person tested;
- type of fit test performed;
- specific model, style, and size of respirator tested;
- date of test; and
- pass/fail results for QLFTs.

Use of respirators

Factors that may result in facepiece seal leakage with a tight-fitting facepiece will not be permitted. Examples include but are not limited to:

- (A) Facial hair that comes between the sealing surface of the facepiece and the face, or
- (B) Any condition that interferes with the face-to-facepiece seal.

If an employee wears corrective glasses or goggles or other PPE, it will be worn in a manner that does not interfere with the seal of the facepiece to the face of the user.

For all tight-fitting respirators, employees are to perform a user seal check **each** time they put on the respirator.

User Seal Check Procedures (Mandatory)

Individuals who use a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved **each time** the respirator is used. The positive and negative pressure checks listed will be used.

User seal checks are not substitutes for qualitative fit tests.

Facepiece Positive and/or Negative Pressure Checks

Positive pressure check. Cover the respirator with hands and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal.

Negative pressure check. Cover the respirator with hands and inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory

Continuing respirator effectiveness

When there is a significant change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, a reevaluation will be conducted to ensure the effectiveness of the respirator.

Supervisors are to ensure that employees/volunteers leave the respirator use area if the respirator is removed or if the user detects changes in breathing resistance, or leakage of the facepiece.

If an employee detects changes in breathing resistance, or leakage of the facepiece he/she is to leave the immediate area and replace the respirator. If there continues to be a problem with the seal, the supervisor must be notified and the employee is not to return to the area until the problem is corrected or eliminated.

Care and storage of respirators

Employees will be provided with disposable respirators that are clean, sanitary, and in good condition. Respirators are issued for the exclusive use of an employee and are not to be shared. Respirators should be stored in a manner that protects them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, deformity and damaging chemicals. When possible keep respirators in the original packaging.

Inspection

Each employee/volunteer is to inspect their respirator before each use. The inspection is to include the following:

- check for pliability of straps and integrity of facepiece;
- check for deformity that may affect the seal; and
- check for any sign of deterioration.

Respirators that fail an inspection or are otherwise found to be defective are to be removed and discarded.

Training information

Training for employees/volunteers in the respiratory program will be comprehensive, understandable and conducted by the Program Administrator or a designee on an annual, and/or as needed basis. Training will be provided before an employee or volunteer is allowed to wear a respirator.

Training will include the following:

- why the respirator is necessary and how improper fit, usage or care will compromise the protective effect of the respirator;
- fit testing procedures;
- what the limitations and capabilities of the respirator are;
- how to use the respirator effectively;
- how to inspect, don and doff the respirator;
- how to perform a user seal check;
- proper storage of the respirator;
- how to recognize medical signs and symptoms that may limit or prevent the effective use of respirators;
- importance of screening questionnaire and follow up when needed; and
- procedures for reporting respirator use difficulty.

Retraining will be administered annually, and when the following situations occur:

- changes in the workplace or the type of respirator render previous training obsolete;
- inadequacies in the employee's knowledge or use of the respirator indicate that the employee or volunteer has not retained the requisite understanding or skill; or
- any other situation arises in which retraining appears necessary to ensure safe respirator use.

Program evaluation

To ensure the respiratory protection program is being properly implemented and that employees are using respirators properly, program evaluations by the Program Administrator will be conducted no less than annually and as necessary. If problems are identified, they will be corrected.

Factors to be assessed include, but are not limited to:

- respirator fit (including the ability to use the respirator without interfering with effective workplace performance) and user seal checks;
- appropriate respirator selection for the hazards to which the employee is exposed;
- proper respirator use under the workplace conditions the employee encounters; and
- proper respirator storage, donning and doffing.

Recordkeeping

Written information regarding medical evaluations, fit testing, and the respirator program will be maintained by the Program Administrator.

The Respiratory Screening Questionnaire will be completed prior to an employee using a respirator. Results of the respiratory questionnaire review will be provided to the District Clinic Director or District Administrator.

Appendix A

Respirator Questionnaire



To the employee:

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 physician who will review it.

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: _____
3. Your age (to nearest year): _____ 4. Sex (circle one): Male/Female 5. Your height: _____ ft. _____ in. 6. Your weight: _____ lbs.
7. Your job title: _____ 8. County & Area you work in: _____ / _____
9. A phone number where you can be reached by the Physician reviews this questionnaire (include the Area Code):

10. The best time to phone you at this number: _____
11. Has your employer told you how to contact the Physician who will review this questionnaire (circle one): Yes*/No
* Contact Anthony Richey at 205-877-2686 for questions about the questionnaire
12. 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).
13. 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: 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

MANDATORY

- 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 |
| d. 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: | 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 |
|--|----------|

REQUIRED N 95 USE ADPH:

- *Medical Needs Shelter Teams provide assistance to patients needing assistance with healthcare after a disaster. The environment may be austere. The team works 12 hour shifts. The N95 may be required if a patient, caregiver, family member or partner agency presents with a potentially infectious condition where more than droplet precautions (surgical masks) are indicated.*
- *Level II (no skin exposure) personal protective equipment for potential Ebola Virus Disease exposure*



Completion of questions 10-15 is voluntary.
 Part B completion is at the discretion of the physician reviewing the form.
Upon completion of the form, FAX IT TO 205-877-2775.

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? | Yes / No |
| 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 - Completion of this section is at the discretion of the physician reviewing the form.

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 chemical 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): _____

Appendix B

EVALUATION FOR PROTECTIVE MASK (N95 RESPIRATOR) USE

Employee _____

Public Health District _____

1. Based on review of the submitted respiratory questionnaire the employee listed above:

_____ is cleared to use an N95 respirator (no limitations).

_____ is NOT cleared to use an N95 respirator.

_____ is cleared with limitations listed below.

Physician's Signature

Date of review

My signature indicates that the employee's questionnaire from the CFR 1910.134, Respiratory Standard, was reviewed and the determination for respirator use was made without seeing the employee.

Appendix C

Sensitivity and Fit testing Procedure

Sensitivity Test

The sensitivity test, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the **taste** of the testing solution.

1. During sensitivity test as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches (30.5 cm) in diameter by 14 inches (35.6 cm) tall. The front portion of the enclosure should be clear from the respirator and allow free movement of the head when a respirator is worn.
2. The test enclosure will have a 3/4 inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.
3. The test subject will don the test enclosure. Throughout the sensitivity screening test, the test subject will breathe through his/her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a bitter or sweet taste depending upon the testing agent.
4. Using a nebulizer, the test conductor will spray the sensitivity solution into the enclosure. This nebulizer will be clearly marked to distinguish it from the fit test solution nebulizer.
5. The sensitivity solution is placed into the nebulizer Labeled #1 Sensitivity Test Solution.
6. To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely, and is then released and allowed to fully expand.
7. An initial ten squeezes are repeated rapidly and then the test subject is asked whether the solution can be tasted. If the test subject reports tasting the appropriate taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.
8. If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the solution is tasted. If the test subject reports tasting the appropriate taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.
9. If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the solution is tasted. If the test subject reports tasting the appropriate taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.
10. The test conductor will take note of the number of squeezes required to solicit a taste response.
11. If the solution is not tasted after 30 squeezes (step 10), the test subject is unable to taste it. The test with this particular solution cannot be performed.

12. If a taste response is elicited, the test subject will be asked to take note of the taste for reference in the fit test.
13. Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.
14. The nebulizer will be thoroughly rinsed in water, shaken to dry, and refilled at least each morning and afternoon or at least every four hours.

Fit Test Procedure

1. The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.
2. The fit test uses the same enclosure as that described in #1 above.
3. The test subject will don the enclosure while wearing the respirator selected. The respirator will be properly adjusted and equipped with any type particulate filter(s).
4. A second nebulizer is used to spray the fit test solution into the enclosure. This nebulizer will be clearly marked to distinguish it from the screening test solution nebulizer.
5. The Fit Test Solution is placed into the nebulizer Labeled #2 Fit Test Solution.
6. As before, the test subject will breathe through his/her slightly open mouth with tongue extended, and be instructed to report if he/she tastes the appropriate taste for solution used.
7. The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.
8. After generating the aerosol, the test subject will be instructed to perform the following exercises:

Test Exercises.

- (A) **Normal breathing.** In a normal standing position, without talking, the subject will breathe normally.
- (B) **Deep breathing.** In a normal standing position, the subject will breathe slowly and deeply, taking caution so as not to hyperventilate.
- (C) **Turning head side to side.** Standing in place, the subject will slowly turn his/her head from side to side between the extreme positions on each side. The head will be held at each extreme momentarily so the subject can inhale at each side.
- (D) **Moving head up and down.** Standing in place, the subject will slowly move his/her head up and down. The subject will be instructed to inhale in the up position (i.e., when looking toward the ceiling).
- (E) **Talking.** The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song. (The tester may recite the Rainbow Passage and have the subject repeat it if there is any question of reading ability.)

Rainbow Passage (to be repeated or read out loud)

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

(F) **Bending at the waist.**

(G) **Normal breathing.** Same as exercise (A).

9. Each test exercise will be performed for one minute. The test subject will be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator will be tried. The respirator will not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.
10. Every 30 seconds the aerosol concentration will be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).
11. The test subject will indicate to the test conductor if at any time during the fit test the taste of solution is detected. If the test subject does not report tasting the solution, the test is passed.
12. If the solution is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator will be tried and the entire test procedure is repeated (sensitivity test and fit testing).

Appendix D
Alabama Department of Public Health
Fit testing Documentation Form

On _____, a qualitative fit test (QFLT) was performed on _____
(Date) (Name of employee or volunteer)

of _____ by _____.
(County or District) (Name of tester)

Solution used: (check one) _____ Bitrex _____ Saccharin

Number of sprays for threshold testing _____

Sensitivity (Taste) Test (check one) _____ Pass _____ Fail

Type of respirator fit tested/issued (brand, model and size) :

Respirator to be used during:

The importance of fit testing, user seal checks before each use of the respirator and dangers of improper use of the respirator was discussed. I understand the topics discussed and acknowledge, by my signature, that I understand if I do not use a respirator in the manner it is designed, I will be at risk for potential injury or illness or possibly death.

Printed Name

Signature

Date

Please check one: _____ Employee _____ Volunteer

Fit tester Printed Name

Fit tester signature

Appendix E
Alabama Department of Public Health
Respirator Training Information

- **Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator**

A respirator (for example, an N95 or higher filtering facepiece respirator) is designed to protect you from breathing in very small particles, which might contain viruses. These types of respirators fit tightly to the face so that most air is inhaled through the filter material. To work most effectively, N95 respirators must be specially fitted for each person who wears one (this is called “fit-testing” and is usually done in a workplace where respirators are used).

Respirators are manufactured to protect against certain contaminants. When respirators are used improperly contaminants may not be filtered and may lead to contaminate exposure and possible injury or illness. In addition, gaps due to improper fit, facial hair or poor respirator condition may lead to contaminate exposure.

- **Limitations and capabilities of the respirator:**

Limitations	Capabilities
1. Will only be effective when used in the manner designed.	1. Can filter up to 99.97% of air contaminants when used in an approved manner.
2. Will only filter contaminate that the filter is approved for(gas, vapor, particulate).	2. Several types available which allows for proper fit.
3. Will only be effective if the fit is correct.	3. Little to no maintenance
4. Will only work if they are maintained as per manufacturer’s recommendations and will only be as effective as the wearer.	4. Disposable use which helps decrease risk of cross contamination.
5. Should not be used as the only type of control measure but in conjunction with administrative controls, engineering controls, infection control measures and good cough etiquette.	5. Easy to train employees on respirator use.
6. Facial hair can interfere with the fit.	6. Can be quite effective when used with other measures.

- **How to inspect, put on and remove, use, and check the seal of the respirator**

- See attached poster and the accompanying DVD.

- **How to properly store the respirator**

N95 respirators should be stored and maintained in their original packaging. The respirators should be kept in an area that protects them from damage, contamination, dust, extreme temperatures, damaging chemicals, sunlight, and in a manner that will prevent deformation.

All respirators should be inspected before each use. The facepiece should be in good condition. Straps should be pliable and help maintain a good seal. If deterioration is noted, the respirator should be discarded and replaced.

- **How to recognize medical symptoms that may limit or prevent the effective use of respirators**

A medical screening questionnaire is to be completed and reviewed by a PLHCP before an ADPH employee wears a respirator. Respirators can cause stress on the body. Symptoms of complications of a respirator may include: shortness of breath, chest pain, dizziness. Any employee who develops signs/symptoms that indicates there may be a medical condition that interferes with respirator use should be removed from the area with the potential contaminate, remove the respirator and speak with their supervisor.

- **Importance of the Medical Questionnaire**

The medical questionnaire is a screening tool to identify individuals who may have a medical condition or issue that could interfere with the safe use of a respirator. An answer of “yes” does not automatically prevent an employee from wearing a respirator

- **Procedures to be completed prior to an employee using a respirator in the workplace.**

- training
- medical questionnaire
- qualitative fit test (before initial use, annually and as indicated)
- user seal checks (before each use)

While fit testing kits are being pre-positioned at this time respirators are not required. Surgical masks DO NOT provide the same protection as an N95 mask.

Appendix F
ALABAMA DEPARTMENT OF PUBLIC HEALTH
RESPIRATOR TRAINING ACKNOWLEDGEMENT

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;
- What the limitations and capabilities of the respirator are;
- How to inspect, put on and remove, use, and check the seal of the respirator;
- How to properly store the respirator;
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators;
- Importance of the Medical Questionnaire; and
- Procedures to be completed prior to an employee using a respirator in the workplace.

On, _____ I received respiratory protection training. The above topics were discussed and I was given the opportunity to ask questions about the material presented. I acknowledged each topic presented by initials. My signature represents:

1) understanding of the material presented and 2) my understanding that if I do not use my respirator in the manner designed, I am placing myself at risk for illness or injury or possibly death.

Name (Printed)

Signature

Trainer's Name

Appendix G
Alabama Department of Public Health
Duties When Respirators May Be Required
Patient Care

(A) The type and weight of the respirator to be used by the employee:

DISPOSABLE FILTERING FACE PIECES (NON-CARTRIDGE)

WEIGHT ESTIMATE - 1 TO 3 OUNCES

(B) The duration and frequency of respirator use:

average number of hours per day - during emergency deployments
possibly up to 12 hours per day

(C) The expected physical work effort:

Light (less than 200 kcal per hour) or

Medium (200-350 kcal per hour)

Heavy (above 350 kcal per hour)

(D) Additional protective clothing and equipment that may be worn:

safety glasses/safety goggles, face shield, and/or gloves, shoe covers, gown

(E) Temperature and humidity extremes that may be encountered:

possible austere environment depending on event.

Appendix H
Acknowledgement of Receipt of Information for Employees/Volunteers Using Respirators
When Not Required (Voluntary Respirator Use)

On _____, I received information about respirators. I am not required to use a
(Date)
respirator in my duties but would like to do so. My signature below indicates that I understand the content in the respiratory information provided (OSHA's Appendix D) and have been given the opportunity to ask questions about the material. I understand that if I do not use my respirator in the manner designed, I am placing myself at risk for illness or injury or possibly death.

Name (printed)

Signature