# **Heat Stress**

Farmworker Health and Safety





## TRAINER GUIDE AND WORK BOOK

#### **Association of Farmworker Opportunity Programs**

1726 M St. NW Suite 602 NW Washington DC 20036 ■ Phone (202) 828-6006 ■ Fax (202) 828-6005 ■ www.afop.org

# Health & Safety Director's Message

Welcome to AFOP's Project SOL Heat Stress Prevention Program! Through generous funding from the Susan B. Harwood Training Grant Program offered by the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA), we are able to bring much-needed training to agricultural workers and their employers that will most likely prevent illness from heat exhaustion or heat stroke, and possibly even save lives.

Farmworkers feed the world while working in one of the most dangerous occupations and face unique challenges on a daily basis – poverty, lack of access to education, health care and other services, exposure to dangerous pesticides that can cause serious illness, and constant uncertainty about their futures are part of their struggle. Illness brought on by extreme heat is yet another variable that threatens their efforts to support themselves and their families. Besides being a serious health risk, heat-related illness means time away from work, lost wages, medical bills, and the resulting stress on their families.

The good news in this is that heat-related illness and death are preventable and prevention does not cost a great deal of money. AFOP's Project SOL seeks to bring information and training to agricultural workers and their employers on the dangers of heat-related illness and how to prevent tragic incidents by providing life-saving training and improving the quality of life for farmworkers and their families. We hope you will use the tools provided here and the resources available from our office to provide the best possible training that farmworkers deserve.

Levy Schroeder

Director, AFOP Health and Safety Programs

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<sup>\*&</sup>quot;This material was produced under grant SH-19485-SH9 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government."\*





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# Introduction

trainings in the future.

This workbook was designed with two purposes in mind:

1) to serve as a written companion to the Association of Farmworker Opportunity Program's (AFOP's) trainthe-trainer course on heat stress prevention and;
2) to be a reference tool for you and your organization when providing heat stress prevention

With this idea in mind, the book before you has been designed as an interactive tool. It consists of alternating sections of background information and activities designed to help you engage with the material in a meaningful way. It is our hope that this



design will provide a tailored approach to note-taking and information gathering, ultimately providing a useful body of information for you, the trainer. We look forward to working with you during this training. We will strive to ensure that you leave feeling equipped with the necessary knowledge and skills to carry out heat stress prevention trainings in the field.

## AFOP -



AFOP is a membership-based organization located in Washington, DC. Since 1971, AFOP has been working with its members to improve the quality of life for migrant and seasonal farmworkers in the United States. It is the Association's belief that training and education are key components to achieving change for the workers who plant, tend and harvest the crops that Americans consume at their tables. AFOP member agencies receive grants from the United States Department of Labor, and other governmental and non-governmental institutions, to administer programs aimed at upgrading farmworkers' skills and providing essential education, including English Proficiency for

those whose native tongue is another language.

AFOP's Health and Safety Program seeks to mitigate the health hazards facing migrant and seasonal farmworkers and their families. True to the organization's mission of providing training and education, the Health and Safety Alliance has a strong history of developing and implementing train-the-trainer courses focused on the promotion of health and safety for members of the farmworker community. In designing these courses, AFOP has partnered with government institutions such as the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA).

# **Heat Stress**



Tiede Seress
Initial Thoughts: As you go through introductions and begin to familiarize yourself with your training group and topic, take time to note
any thoughts or questions that come to your head in the space provided below:
Expectations:
You will likely bring a number of expectations with you to this training— expectations about what you wi learn, about what will be expected of you and about what you will be doing with your new skills. Take moment to write down your expectations in the space provided below:

# **Training Objectives:**

During this training, we hope that you will learn the basics of heat stress prevention. In addition, we want you to leave feeling confident and ready to carry out trainings with the farmworkers in your communities. To help guide us in achieving these goals, we have created a number of general objectives for the training, along with more specific objectives that will allow us to determine if we have met our overall goals. The objectives for this training are listed below, allowing you to check them off once you have determined that you, as an individual, have met the goal.

Object	ive A:
Traine	rs understand their role as trainer and know how to do outreach in the community.
	Each trainer has completed an outreach plan by the end of the two-day training session.
Object	ive B:
Traine	rs understand what heat stress is and how to prevent and respond to it in the field.
	Trainers can correctly identify 5 symptoms of heat-related illnesses.
	Trainers can correctly identify at least 5 steps to be taken in caring for a victim of heat-related illnesses
	Trainers can correctly identify 3 personal and 3 environmental risk factors for heat-related illnesses.
	Trainers can identify 3 strategies for preventing heat-related illnesses in the field.
Object	ive C:
Traine	rs are able to conduct heat stress trainings.
	Trainers have practiced the heat stress training with the flipchart at least twice by the end of the two-
	day session.
	Trainers state they feel prepared to give a training to farmworkers on heat-related illnesses.

# Farmworkers – Who are they?



As a trainer, you will be working with migrant and seasonal farmworkers, training them on the prevention of heat stress and heat-related illnesses (HRI). One of the most important things to consider, once you begin to design your trainings, is the population with which you will be working – who they are, where they are from and what motivates them.

It has been estimated that over 2.5 million migrant and seasonal farmworkers work in the United States. Most of the demographic information that is known about this population comes from the National Agricultural Workers Survey (NAWS), an ongoing assessment conducted by the US Department of Labor. The most recent phase of the survey, conducted between 2000 and 2002, compiles information from interviews with 6,472 farmworkers. The information gleaned from these interviews is used for a wide variety of purposes. For our purposes today, it will give us a glimpse into the lives and characteristics of the people who put the food on our tables, the people with whom you will be working.

The space below has been provided for you to take notes, as you see fit, on the characteristics of the farmworker population and their relevance to your future work on heat stress prevention.

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## Why Heat Stress?



The following case study was reported in the September 2008 edition of the Journal of the American Medical Association:

"In mid-July 2005, a male Hispanic worker with an H-2A work visa (i.e., a temporary, nonimmigrant foreign worker hired under contract to perform farm work) aged 56 years was hand harvesting ripe tobacco leaves on a North Carolina farm. He had arrived from Mexico 4 days earlier and was on his third day on the job. The man began work at approximately 6:00 a.m. and took a short mid-morning break and a 90-minute lunch break. At approximately 2:45 p.m., the employer's son observed the man working slowly and reportedly instructed him to rest, but

the man continued working. Shortly thereafter, the man's coworkers noticed that he appeared confused. Although the man was combative, his coworkers carried him to the shade and tried unsuccessfully to get him to drink water. At approximately 3:50 p.m., coworkers notified the employer of the man's condition. At 4:25 p.m., the man was taken by ambulance to an emergency department, where his core body temperature was recorded at 108°F (42°C) and, despite treatment, he died. The cause of death was heat stroke. On the day of the incident, the local high temperature was approximately 93°F (34°C) with 44% relative humidity and clear skies. The heat index was in the range of 86°–101°F (30°–38°C) at mid-morning and 97°–112°F (36°–44°C) at mid-afternoon.

"Similar conditions had occurred during the preceding 2 days. The man had been given safety and health training on pesticides but nothing that addressed the hazards and prevention of heat related stress. He reportedly only spoke Spanish. Fluids, such as water and soda, were always available to the workers in the field; however, whether the man drank any of these fluids is unknown."

Heat-Related Deaths among Crop Workers – United States, 1992 – 2006." (Reprinted) JAMA, September 3, 2008—Vol 300, No. 9.

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# Getting on the same page....

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eat Stress:	
eat-related illnesses:	
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# Heat Stress 101 –



Human beings, as a rule, must maintain a constant internal body temperature of roughly 98.6°F or 37°C. The reasons for this are straightforward, having to do with the ideal temperature at which many of our internal chemical reactions and processes function to their fullest potential. While 98.6°F is ideal, the body's internal temperatures are influenced by a host of internal and external factors and must have a system in place to regulate body temperature. At any given moment, the body is engaged in a balancing act of heat generation and heat release.

The body acquires heat from a number of different sources including heat that it generates, and heat that it receives from the surrounding environment. Generated body heat comes primarily from the by-products of chemical reactions and from the heat generated by the work of the body's muscles, including those muscles that cause shivering when a person is cold. Environmental heat comes from the surrounding air, from direct light and from equipment that gives off large amounts of heat. While the human body needs a significant amount of heat to maintain its temperature of 98.6°F, on occasion, the body acquires too much heat. In these instances, the body must release heat, preventing internal temperatures from rising too high.

To release heat into the environment, the body must first transfer heat away from the internal core of the body, toward the body's surfaces near the skin. This is done by dilating, or widening, the blood vessels on the outermost parts of the body, near the skin. The heart then works to pump blood to these regions. The blood carries heat, which can then be released. There are four primary ways in which the human body releases heat: evaporation, conduction, convection, and radiation.

The first of these mechanisms, **evaporation**, happens when a person sweats. Sweat, a liquid, is released through glands onto the skin of a person's body. There, the liquid sweat must use energy to convert itself into a gas and evaporate. This energy is in the form of heat that the body is trying to release. So, the evaporating sweat literally takes heat with it as it goes.

The second mechanism, **conduction**, refers to what happens when the body comes into contact with something that is cooler than itself. In this instance, heat is actually transferred from the skin of the person to the cooler object, releasing heat and making the person feel cooler.

**Convection** and **radiation** are very similar processes. In convection, air passing over the surface of the skin "lifts" heat off of the surface. This is why a person may feel cooler on a windy day. Radiation also releases heat directly into the air, but does so even in the absence of wind. Heat simply transfers itself from the body into the surrounding environment. All of these processes are subconscious, controlled by the human brain.

However, sometimes the body becomes so hot that its heat-regulating mechanisms simply can't eliminate enough heat. When this happens, the internal body temperature begins to rise above 98.6°F, affecting our physiological processes and resulting in strain on the body that we refer to as **heat stress**. This heat stress on the body results in symptoms that we categorize into different heat related illnesses (HRIs), based on their severity.

# Illness

The following diagram presents various HRIs and the symptoms that correspond with each.

Heat rash Prickly heat	Signs and symptoms:	Red spots on the skin that resemble blisters; prickly or itchy sensation.
	What's happening:	Sweat glands become clogged and inflamed when sweat cannot evaporate; happens in humid conditions and/or when clothing traps sweat against the skin.
Heat cramps	Signs and symptoms:	Spasms of the legs, arms or abdomen; often accompanied by heavy sweating and thirst; happens after physical labor.
	What's happening:	A loss of body salt, through sweat, causes water to rush into the muscles, resulting in cramping or spasms.
Early heat illness	Signs and symptoms:	Fatigue; dizziness; irritability; inability to concentrate; impaired judgment.
	What's happening:	Blood flow to the brain is reduced as the body redirects blood to release heat from the skin.
Heat syncope	Signs and symptoms:	Sudden dizziness; pale complexion; moist skin; normal body temperature.
	What's happening:	Blood flow to the brain is reduced as the body redirects blood to release heat from the skin.
Heat exhaustion	Signs and symptoms	Excessive sweat; dry mouth; extreme thirst; headaches or feeling dizzy; lightheadedness; mood changes or irritability; rapid breathing; chills; fainting or weakness; heat cramps; nausea; decreased or dark-colored urine; pale; moist skin; fatigue.
	What's happening:	Less blood flow to the brain, resulting from blood flow to the body's surfaces; this results in less oxygen reaching the brain and therefore lightheadedness, headaches, and mood changes; the body's temperature regulator is still functioning, trying to cool the body.
Heat Stroke	Signs and symptoms:	Often occurs suddenly; extremely high body temperatures; lack of sweating; confusion or aggressive behavior; seizures or convulsions; coma in severe cases; unresponsiveness to clapping; dizziness; fast pulse; dry, hot, red skin.
	What's happening:	Over 150°F, the body stops sweating and the temperature-regulating system stops functioning due to too much heat; blood flow to the brain is significantly reduced; rising internal temperatures risk damage to organs including the heart, brain, central nervous system, liver and kidney; brain damage or death can result.



The following scenarios depict situations in which one or more individuals are suffering from heat stress and possibly an HRI. Read over the scenarios and decide how you would respond. You have been provided with a number of suggested steps for each situation. It is up to you to decide if the steps are appropriate, what order you should perform them in, and if there is any additional care that you should provide for the person affected. Record your response to the situation in the space provided.

Even though Fernando was out drinking last night, he still manages to wake up at 5 a.m. to get out to the fields at an early hour. He packs two bottles of water and is sure to wear a long-sleeved shirt to prevent pesticide exposure. He arrives at the fields at 7 a.m. and starts to pick onions. The temperature quickly rises to a stifling 100°F by 11 a.m. To harvest as much as possible, Fernando doesn't take any breaks. While Fernando had prepared and brought water, he is thirstier than he realized he would be and finishes his water by 10 a.m. Around 11:30, Fernando begins to feel tired and dizzy. Thinking nothing of it, he keeps working. Soon after, Fernando faints in the fields, where you, his coworkers find him. What should you do and in what order?

- Take off Fernando's boots and socks.
- Get medical attention.
- Check to see if Fernando is conscious. If he is, give him water.
- Loosen his clothing, especially around his neck, chest, and waist.

Tell the crew leader. (One person can do this while another is helping Fernando).

- Move Fernando to a shady spot.
- Splash cool water on Fernando's body.

Reyna continues to harvesting chiles all morning and the temperature has soared well into the 90°F's. Despite the heat, Reyna continues to harvest as quickly as possible, knowing that once her baby is born, she won't be able to work for a few months. Though she is thirsty, Reyna's husband has her water and he is a few rows away. Since it is late morning anyway, she decides to wait until lunch break to rehydrate. At lunch, Reyna has a hard time finding a spot in the shade to rest, so she sits at the end of her row, feeling weak from the hard morning's work. Reyna's husband, Mario, approaches and sits to eat lunch with her. Suddenly, Reyna feels dizzy and confused. She lashes out at him, yelling at him for having her water all morning. Mario is confused because Reyna is not usually an aggressive person. Suddenly, she begins convulsing and throws up. Mario calls to you, the nearby workers, for help. What should you do and in what order?

- Pour cool water over her body.
- Wait for the crew leader to arrive, so that he can bring her to the clinic.
- Clean her mouth of the vomit.
- Fan her body.
- Drape a wet shirt over her chest.

Remove her shoes and socks.

- Move Reyna to a shaded area.
- Loosen her clothing.
- Make sure health professionals know that Reyna is pregnant.

Maria and Mateo are hanging tobacco leaves in a tobacco shed at the edge of the fields. They are short staffed today so they have been hurrying between the wagon and the shed, hauling heavier armloads than normal. It is a blistering hot day of 90°F. Inside the tobacco shed, temperatures have reached 110°F, and the air feels hot and heavy. Maria suddenly feels weak and sits down to take a break. She is in the hottest part of the shed, but she can not work up the energy to move to someplace cooler. Mateo, noticing that she has taken a break, picks up the pace to keep up with the workload. Soon, he too has a headache and suddenly passes out. As the tobacco starts to pile up outside, your crew decides to check in on Mateo and Maria to see what's happening. You find Mateo passed out and Maria looking very sick. The shed is the only shade available in a fifteen minute radius. What should you do and in what order?

- Check to see if Mateo is breathing. (He is).
- Move them to fresh air outside the shed, even though it's under direct sunlight.
- Keep them in the shed, where there is shade from the sun.
- Transport them to a medical facility.
- Send someone to look for the crew leader.
- Loosen their clothing.
- Cover Mateo with a wet shirt.
- Give Maria an energy drink to revive her.
- Elevate Mateo's legs.
- Give Maria water.
- Fan both of them.

Victor has been working in the fields for the last 45 years. At 65, he considers himself well-adjusted to all conditions that can happen while working outside. Today, he is picking strawberries. Victor knows that pesticides are used heavily on this crop; therefore he has decided to wear an especially thick, long-sleeved shirt to prevent pesticide exposure. Today is not much different from the many other days that he has spent in the fields. It is hot, almost 100°F, and there is not a cloud in the sky. However, for some reason Victor is feeling more tired than usual. He begins sweating profusely and starts to breathe heavily. He turns to his coworker to ask for some water, and his coworker comments on his slurred speech. Victor says that he needs to sit down and his coworker calls to you for help. What should you do and in what order?

- Give him as much water as he can drink.
- Ask Victor if he thinks he should go to the clinic.
- Tell Victor to rest and return to the fields when he feels better.
- Encourage Victor to remove his long sleeve shirt.
- Ask him to rest lying down.
- Tell the crew leader.
- Help Victor to a shady spot.
- Place a cold compress on Victor's neck.
- Help Victor remove his boots and loosen his clothing.

## First-Aid Response for Heat Exhaustion and Heat Stroke:

The following responses are recommended for the treatment of the different heat-related illnesses. Look them over and compare them with your responses in the previous activity.

- ✓ If you suspect that the person is suffering from heat exhaustion you should do the following:
  - Stop working.
  - Immediately move the person into the shade and have them rest lying down.
  - Give the person tepid water, in small amounts and have them drink as much as possible.
  - Splash the person's body with water.
  - Loosen all clothing, especially around the neck, chest and waist.
  - Use a hat, shirt or cardboard to fan the person.
  - Stay with the person.
  - If the person does not improve, or if the person has lost consciousness, call for medical help immediately.
- ✓ When treating a person for heat exhaustion, you should NOT:
  - Give the person salt.
  - Let the person go back to work.
- ✓ If you suspect that the person is suffering from the more serious heat stroke, you should do the following:
  - Get the person into the shade.
  - Start cooling down the body immediately.
  - Remove or loosen clothing.
  - Take of the person's hat, shoes and socks.
  - If the person is conscious and not vomiting, help them to drink as much as possible, in small sips.
  - Pour cool water on their chest and apply wet towels or wet sheets to their body.
  - If there is ice on site, place ice packs in their armpits and groin area.
  - To avoid cooling the person too drastically, massage the person's limbs; if they begin to shiver, remove the ice or cold blanket.
  - Elevate the person's legs.
  - Fan them with a hat, shirt or piece of cardboard.
  - Stay with the person.
  - Get the person medical care as soon as possible.
- ✓ As with heat exhaustion, when treating a person for heat stroke you should NOT:
  - Give the person salt.
  - Let the person go back to work.

Remember that it is always important to seek medical attention. However, in the case of heat stroke, the most important thing is to start cooling the person down IMMEDIATELY. If you don't, the person could die. If it is faster, drive the person to a clinic or hospital yourself instead of waiting for an ambulance. But DO NOT stop fanning or pouring water on the victim until a medical professional is attending them. If you need help transporting the person and keeping them cool, ask other workers to help you.

# Risk Factors:



There are a number of personal and environmental characteristics that can make a person more susceptible to developing HRI. Because these characteristics, or factors, raise a person's risk of heat related symptoms, we refer to them as risk factors. Take a moment to think about characteristics of a person that may make them more likely to suffe illness as a result of being hot. Think critically about who this person may be, his or her history, his or her health status etc. In addition, analyze the characteristics of an environment in which he or she may be most susceptible to heat related illness. Think specifically about the time of day, time of year, weather, etc. Make a list in the space below of the personal and environmental risk factors that you can think of. After making your list, compare it with the information provided on the following pages to see if there is anything that you did not think about.

# **Personal Risk Factors:**

Generally, personal risk factors for heat-related illnesses are associated with one of two things:

- 1. The person's physiological response to heat;
- 2. OR the person's behavior towards heat.

#### **Examples of personal risk factors include:**

- **Weight** People who weigh more have more mass, which generates heat in their core and causes them to retain more heat. In addition, overweight people tend to have less physically fit muscles and expend more energy during physical activity, creating more heat.
- **Pregnancy** Pregnant women must be careful because an increase in their core temperatures may affect the fetus, which can lead to negative health effects for both the fetus and mother
- **Age** Very young or very old people are more susceptible to heat-related illnesses. Older people sweat at a slower rate than younger people, meaning that their sweat cooling mechanism is less efficient. They also have a lowered capacity for pumping blood than a younger person. Infants and young children's body mass to surface area ratios are smaller than adults, so they are at higher risk for heat-related illnesses. Both young and old people also have problems with their central nervous systems (it is not fully developed in children, and it is often deteriorated in older individuals), the system that helps to regulate your body's temperature.
- Existing medical conditions Chronic health conditions alter the body's physiological response to heat stress in a variety of ways: heart conditions impair the heart's ability to properly circulate blood and cool the body; high blood pressure and diabetes impair the blood vessel's ability to dilate properly, also restricting blood flow; skin conditions hinder the process of heat release; and many other conditions result in a lowered ability to properly cool oneself.
- *Physical fitness* Muscles that are accustomed to physical activity work more efficiently and generate less heat. People with strong cardiovascular systems also adjust better to changes in temperature and physical activity
- **Acclimatization** When a person's body is not used to working in extreme heat, its heat regulating system does not function as well as someone's who is used to the heat.
- Drinks Alcohol and energy drinks may dehydrate the body and increase the chances for heat stress.
- Attitudes Cultural or personal beliefs about a person's susceptibility to heat, about their need for income, and about illness and environment, may all affect the way in which a person prepares for working in the heat. Certain cultural or personal beliefs may lead a person to take risky behaviors, increasing their risk for heat-related illnesses.

## **Environmental Risk Factors:**

Environmental risk factors for HRI refer to environmental conditions that impair the body's ability to regulate its internal temperature in an effective manner. To understand environmental risk factors, it helps to remember the four ways in which the body eliminates heat: evaporation, conduction, convection, and radiation.

- **Temperature** Higher ambient (environmental) temperatures increase the body's temperature and limit its ability to release heat through radiation (the body can only transfer heat to the air if the air is cooler than the body's temperature).
- **Presence of heavy machinery** Heavy farm machinery can produce high amounts of heat; this heat increases a person's risk of heat stress in the same way that high ambient temperatures do.
- *Time of day* Afternoon hours are often hotter than earlier, morning hours.
- **Shade or cloud cover** Temperatures can vary drastically between sun and shade. In the absence of any shade or cloud cover, an individual can be exposed to extremely high temperatures.
- Wind Wind helps sweat to evaporate and the body to cool. It also picks up heat through convection from the skin's surface.
- Humidity If the air is humid, it becomes difficult for sweat to evaporate and the body loses one of its most
  effective cooling mechanisms.
- **Workload** Physically demanding work makes the body generate more heat, because the muscles are used more.
- **Heavy clothing** Certain clothing items trap heat, such as those used as Personal Protective Equipment, hindering the ability of sweat to evaporate and insulating the skin, preventing heat release through convection, or radiation.
- **Pesticide exposure** Certain pesticides can cause a person to sweat excessively, losing water and increasing his or her risk of a heat-related illness.

#### **Medications:**



There are certain classes of medications that increase a person's risk of heat-related illness. Some of the most common medications include: *vasoconstrictors*, medications that help narrow your blood vessels; *beta blockers*, which block adrenaline and are used for certain cardiac conditions; *diuretics*, which help your body eliminate sodium and water; and *antidepressants* or *antipsychotics*, used to alleviate psychiatric symptoms.

# What to do about these risk factors:

It is extremely important that individuals are aware that these risk factors can dispose a person to developing heat-related illnesses. If a person is affected by one or more of the personal risk factors for HRI, he or she should take extra precautions when working in the fields. This includes taking more frequent breaks and drinking more water. In addition, the person should be sure to alert his or her supervisor to the fact that he or she is susceptible to heat-related illnesses, and explain why. Finally, individuals should always work in pairs, talking to each other frequently throughout the day and reminding each other to take shade and water breaks.

It is equally important that farmworkers be aware of the environmental conditions that predispose someone to developing an HRI. The importance of this must be stressed, particularly given the fact that many farmworkers feel powerless to create or advocate for their own schedules. If possible, time should be spent working with farmworkers on ways to advocate for themselves and their health with their employers, teaching them ways in which to suggest more comfortable hours and conditions in which to work.

## **Prevention:**

As you are working with farmworkers, it is important to stress that the prevention of heat-related illnesses is easier than the treatment them, and that it is relatively simple. Be sure to discuss the following measures, which can be employed to ensure that individuals minimize the risk of developing a heat-related illness:

- Always wear loose-fitting, light-colored clothes that are made of cotton; this type of clothing breathes better and absorbs less heat from the sun
- DO NOT wear dark-colored clothing or clothing made of synthetic fabrics such as polyester, nylon and rayon; this type of clothing will absorb and hold heat
- Always wear a hat with a brim or cap
- Use a bandana under your hat; you can also wet a bandana and place it on your neck to keep you cool
- Drink plenty of water before going to work
- While you are working, drink one quart of water in small quantities throughout each hour (this equals one cup of water every fifteen minutes)
- Drink BEFORE you get thirsty
- DO NOT drink alcohol, energy drinks or soda, or use drugs; all of these substances make it easier for your body to lose water and increase your chance of heat exhaustion or heat stroke

## **OSHA** and Heat Stress Regulations

The Occupational Health and Safety Administration (OSHA) is an agency within the United States Department of Labor, created in 1970 under the Occupational Safety and Health (OSH) Act. The agency is charged with the prevention of work-related sickness, injury, or death. This is achieved through the enforcement of a number of regulations regarding workplace conditions and employer responsibilities.

Under the OSH Act, states are allowed to create their own occupational safety and health plans, as long as they cover public employees and provide, at a minimum, the same standards as federal OSHA regulations. Following this lead, twenty-four states, Puerto Rico and the Virgin Islands have created their own plans, the vast majority of which adopt standards identical to the federal government. However, in a few instances, states have gone above and beyond, drafting their own regulations on specific issues.

Unfortunately, federal OSHA regulations do not include standards specific to the prevention of heat stress or heat-related illnesses. What the federal standards do include are the *General Duty Clause* of the OSH Act (Section 5(a) (1)) and a number of standards relating specifically to agricultural work. Under the *General Duty Clause*, employers:

- (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
- (2) shall comply with occupational safety and health standards promulgated under this Act.

In addition, agriculture employers with more than 11 employees must comply with the standards set forth 1928.110, including:

#### 1928.110(c)(1)(i)

Potable water shall be provided and placed in locations readily accessible to all employees.

#### 1928.110(c)(4)

The employer also shall inform each employee of the importance of each of the following good hygiene practices to minimize exposure to the hazards in the field of heat, communicable diseases, retention of urine and agrichemical residues.

#### 1928.110(c)(4)(ii)

Drink water frequently and especially on hot days

But among those states that have created additional workplace regulations, a few have created regulations that specifically address the prevention of heat-related illnesses, including California and Washington. The table below shows the states participating in AFOP's heat stress prevention program and the OSHA-specific regulations that may apply in each state.

## **OSHA and Heat Stress Regulations**

#### **State OSHA Plans and Regulations Concerning Heat Stress Prevention**

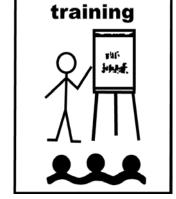
State	State Plan Exists	State Heat Stress Regulations Exist	What regulations apply?	Requirements
California	Х	х	California General Industry Safety Orders 7.2.10 §3395. Heat Illness Prevention	Provision of water; access to shade; rest; training (employee and employer); emergency response plan
Delaware			OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient potable drinking water
Florida			OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
Illinois	X*		OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
Maryland	Х		OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
New Mexico	Х		OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards; NM Admin. Code 11.5.4	Safe working environment; sufficient and accessible potable drinking water
New York	X*		OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
Ohio			OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
Puerto Rico	X		OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
Texas			OSH Act General Duty Clause; Standards - 29 CFR Agricultural Safety Standards	Safe working environment; sufficient and accessible potable drinking water
Washington	Х	Х	Washington Administrative Code 296-62-095 Outdoor heat exposure	Heat stress prevention program; drinking water; appropriate response; training (employees and supervisors in language understood to them)

<sup>\*</sup> These state plans apply only to public-sector employees; the federal government has jurisdiction over private sector employees in these states and OSH Act standards apply here

# Section II – Training Farmworkers

of an unsuccessful trainer or training.

Ultimately, the purpose of this training is to prepare you, the trainer, to do the best that you can and enjoy what you are doing. The goal is that you leave the training feeling prepared to speak with farmworkers about the basics of heat stress prevention. Learning about heat stress is a vital component in preparing you to be an effective trainer, but it is not the only one. You must also be prepared to convey your newfound knowledge to the farmworker population in a way that relays information while actively engaging them, ensuring that they *learn* and *use* this important information.



Take a moment to think about training sessions, workshops and classes that you have attended in the past. As you think, note the aspects of the training that you found effective and those that you did not find particularly relevant or helpful. In the space provided, make a list of characteristics that you would associate with a successful trainer or training and characteristics

Characteristics of a Successful Trainer/Training

Characteristics of an Unsuccessful Trainer/Training

# Tips for a Successful Training Session:

☐ Be prepared for questions.



Training, teaching and public speaking are important skills that are sometimes difficult to do. One can always overcome any challenges with practice, making these activities enjoyable and professionally fulfilling. There are a number of things to keep in mind as you begin planning your training session.

•	our audience. You will feel more confident and project a better image if you know what you are doing, what you king about and how it is relevant to the people that you are training.
	Practice using your flipchart as many times as you can, in Spanish and in English.
	Do additional research on heat stress, on farming practices in your area, and on local and state laws and regulations.
	Create a training box that contains all necessary props and materials for your session.
	Practice responses to difficult questions.
	Know your limits and be prepared to say "I don't know, but I will find out for you".
involvo activit	d, actively engage your audience in the material. Training is more fun for everyone when you get your audience ed. In addition, many people are not comfortable learning in a strictly lecture environment, so using engaging ies can help to address a wide variety of learning styles (for more info on learning styles, see the section that y follows this one).
	Use props and visuals to reinforce important points.
	Ask questions and have the participants answer.
	Encourage participation whenever possible.
learnir	create a high-quality learning environment. People will learn best in an environment that is conducive to ng. While it may be difficult to have complete control over your sessions, be conscious of the fact that a good ng environment will result in more people retaining, and eventually using, the information.
	Limit the number of people in sessions to less than 30.
	Make sure the participants are comfortable by holding trainings in a quiet, cool, shaded place.
	Use "crowd control" to keep the conversation fluid and meaningful.
	n, <b>be an effective public speaker.</b> People have to understand you and relate to you in order to learn from you. ve public speaking takes effort, practice, and conscious concentration.
	Speak loudly and clearly.
	Move around and into your audience.
	Project a positive, friendly attitude. Smile and make small talk with the workers before training begins.
	Use personal experiences to supplement your material, helping your participants relate to you as a person.

First, be prepared. The most important thing that you can do to make your trainings a success is to know your material

# Know your population:

While it is always important to practice good public speaking skills and to be organized, it is equally important to think about the people that you will be training as you begin to design your educational session. Think back to the session where you identified common characteristics of the farmworker population. Is there anything you remember that may influence the way that you give a training to this group of individuals?



# **Learning Styles:**

As you begin to think about your training sessions, it is important to recognize that not everyone learns in the same way. A number of studies have been done over the years that suggest a myriad of learning cycles and styles. For the purposes of our trainings, it is important to recognize this fact and to work to incorporate a variety of training activities that may address various ways of learning.

It is also important to note that, while individuals may identify more heavily with one learning style, learning is a dynamic process. So, while incorporating a number of training techniques and activities is an effective way to reach individuals with different learning styles, it is also a good way to make your training a more fluid, dynamic, experiential learning session. Listed here are a number of ideas for training activities and who or what they may be useful for.

## A NOTE ON LEARNING STYLES...

Way of learning	Sample tools or activities
Learning through experience	case studies; experiments; role plays; simulations; worksheets; timelines; debates; participation in a process
Learning through emotions	icebreakers; group discussions; individual reflection; games; storytelling; discussing videos or images;
Learning through analysis	lectures; surveys; instructional videos; hand-outs; overheads; flipcharts; demonstrations
Learning through exploration	dramas; skits; puppet plays; action plans; goal setting; games

The table above shows four ways of learning and suggests types of activities that appeal most to individuals who learn in those ways. Looking at the sample tools, come up with an example of one activity for each learning style that you could use in a heat stress prevention training session in the fields.

Learning Styles	
Annual Control of the	
Learning by doing –	
Learning by feeling –	
Learning by analyzing –	

Learning Styles		
Learning by exploring -		

#### **Ideas for Interactive Trainings:**

Incorporating a number of training techniques and activities is an effective way to reach individuals with different learning styles. It is also generally a good way to make your training a more fluid, dynamic, and experiential learning process. Listed here are a number of ideas for training activities and what they may be useful for.

Acting or dramas can often help participants look objectively at sensitive situations, or explore the consequences of certain actions:

- Puppet plays
- Role plays
- Dramas or skits

Scenarios are helpful for reflecting on and discussing situations:

- Stories read out loud
- Pictures
- Case Studies

Some activities help participants gain first hand insights and experience:

- Demonstrations
- Participation in a process

Activities that help discover what participants need to know are great ways of initiating discussion and performing needs assessment:

- Interviews
- Questionnaires
- Expectation-generating activities

Certain activities help participants to share ideas or gain a better understanding of themselves:

- Individual reflection
- Group discussions
- Partner Interviews

## Your Flipchart



The heat stress prevention flipchart is the primary tool that you will be using for your trainings in the field. It contains the most important information to relay to farmworkers and suggests some trainer activities for creating a more active learning environment. You should memorize your flipchart and learn to know its information and illustrations well. This does not mean that you cannot do more creative things with your presentation. Your heat stress flipchart simply serves as a basis for your training sessions.

Observe the flipchart training session that is being provided to you and note any observations below:		

## **Practice Makes Perfect:**

Practicing with your flipchart is one of the most important things you can do to ensure that you are properly prepared to give a heat stress prevention session to farmworkers. As you practice, note things other trainers do well and things they may need to improve upon. After each session, share feedback. Note the things you did well on and indicate that you should continue to do them. Also note the items you may need to work on and propose a practical way of improving your presentation style.

#### **Giving Constructive Feedback**

The practice session with your group is intended to help you familiarize yourself with the Heat Stress Prevention Flipchart and help you to improve your training and presentation style. In order for this session to be productive it is essential that you focus on giving and receiving constructive feedback. Here are some tips for both giving and receiving constructive feedback:

When giving feedback:

Try to be as specific as possible.
Start by pointing out something positive that the person has done.
Use observations and facts; try to steer clear of stating advice or feelings
Pay attention to the tone of your voice and your choice of words.
Collaborate and come up with solutions together.

When	receiving feedback:
	Listen attentively and allow the other person to share their observations completely.
	Think critically about the feedback that others are providing you – it is not intended to offend, but rather, to help.
	Fight the tendency to be defensive.
	Thank the person providing feedback.
	Thank the person providing recuback.
Observ	vations of other trainers:

#### How you can improve for the future:

As you begin your second practice section in front of the large group, think about the things you had hoped to improve upon. Consciously pay attention to them as you give the presentation. At the end, note the observations the group has shared about your training style.

Group observations of	f you:	
Room for imp	rovement:	
Things done w	vell:	
Self Analy	ysis and Goals	GOAL
Having received feedb	pack twice from people in your training group, tails that will help you to improve your training sty	

## **Paperwork**

As is always the case with our trainings, AFOP needs a written record of the trainings you complete. This written record has two components:

- (1) A roster, listing the individuals that you have trained; and
- (2) A written report, summarizing the training that you have given.

The roster should list the date of the training, location, participants' names and signature and the name of the grower for whom they are working. An example roster has been included at the end of this workbook and can be photocopied for use during your sessions.

The written report should document the date of the training, location, number of participants in attendance, name of the grower, activities performed, difficulties faced and successful aspects of the training. A written



report outline can be found at the end of this workbook and can, again, be photocopied and used when needed.

# The Roster and Written Report are mandatory components of your heat stress prevention training program. They must be completed every time that you have a training.

In addition, you will be conducting pre and post-tests with the participants of your trainings, which will give AFOP an idea of how much information the participants are learning and retaining. The pre and post- test are not necessary for each training that you do. Instead, we are requesting that you conduct pre and post tests with approximately 10% of the participants in your trainings, or at every 10<sup>th</sup> training that you conduct. The pre and post- test can be found at the end of the workbook.

You will also find a post-training employer survey at the back of the book. This is AFOP's way of measuring long-term behavior change in the workplace. We would like you to complete this survey with 5 employers whose employees have received training over the course of the two-year program. Ideally, the survey should be conducted at least 2 weeks after the training, but not more than one month, as the employer is likely to forget any observed changes.

#### All documents should be mailed, upon completion to:

Heat Stress Prevention Program Manager at AFOP 1726 M Street NW, Suite 602 Washington, DC 20036

washington, De 20050

## Outreach

The first contact that you make in person with a grower, crew leader, farmworker, or service provider can be crucial to the type of relationship that you develop with each. Their initial impression of you can many times determine whether or not you will be able to give heat stress trainings to their workers.

Making contact with these individuals, and selling your training to them, is a crucial first step in arranging here prevention trainings. In the space provided below, brainstorm some ideas for reaching out to growers, crew lead farmworkers.		
	_	

Remember, as you conduct your outreach that there are a few simple things you can do to easily impress the individuals with whom you will be meeting.

## Know your message

Take time to develop a clear message about who you are, the service you are providing, and how it can benefit each of the groups that you work with. You should be able to express this message to anyone with whom you meet. Your ability to communicate clearly who you are and what you do will make others realize that you are a well-prepared heat stress trainer.

To make sure that you know your message and are prepared to speak about heat stress at any moment, develop an "elevator speech" about heat stress prevention. An "elevator speech" is a short, persuasive description of an idea. The speech should be concise and compelling. The name "elevator speech" reflects the fact that you should be able to describe your idea to someone in the amount of time that you would normally share an elevator with them, or between 30 seconds and two minutes.

Draft an elevator speech on heat stress prevention below:	
· · · · · · · · · · · · · · · · · · ·	

# Be professional

You sho	ould always maintain a professional attitude with everyone you meet. The following guidelines can help:
	Always arrive on time for trainings, or early if you need to set up.
	Always arrive on time for meetings with growers and service providers.
	Shake hands with individuals that you meet with.
	Follow-up meetings with a thank you letter.
	Dress appropriately.
	Only make promises that you can keep.
	Have the courage to say that you don't know the answer to a question; if you offer to find out the answer and follow up, be sure to follow up.
Fol	low up and be persistent
•	ou establish a relationship with a grower, farmworkers, or service provider you should do everything possible to n your relationship with that person. There are many ways to follow-up on your initial contact:
	☐ If someone expresses interest in your trainings, follow up with a phone call.
	☐ After giving a training, write a letter of thanks to the grower.
	☐ After giving a trainer, give a copy of the roster to the grower, in person.
	☐ When you run into growers that have participated in your trainings, say hello.
We hop	pe that you now feel prepared to provide vital heat stress safety trainings to the farmworkers in your community

We hope that you now feel prepared to provide vital heat stress safety trainings to the farmworkers in your community. Equipped with the knowledge, the tools and the experience of actually providing a presentation, you will be an important resource to the people that help to put food on our tables. If you are seeking additional information on heat stress and heat stress prevention, be sure to check out the following resources:

National Institute for Occupational Safety and Health, "Health Topic: Heat Stress" located at: http://www.cdc.gov/niosh/topics/heatstress/

Center for Disease Control, "Extreme Heat: A Prevention Guide to Promote Your Personal Health and Safety", located at: <a href="http://www.bt.cdc.gov/disasters/extremeheat/heat\_guide.asp">http://www.bt.cdc.gov/disasters/extremeheat/heat\_guide.asp</a>

Mayo Clinic, "Heat Stroke: First Aid," located at:

http://www.mayoclinic.com/health/first-aid-heatstroke/fa00019

Mayo Clinic, "Heat Exhaustion: First Aid," located at:

http://www.mayoclinic.com/health/first-aid-heat-exhaustion/fa00020

Occupational Safety and Health Administration, "Safety and Health Topics: Heat Stress," located at: <a href="http://www.osha.gov/SLTC/heatstress/">http://www.osha.gov/SLTC/heatstress/</a>

# Project Sol, Farmworker Heat Stress Prevention Training



Lista de Participantes

Ubicación (Location): Nombi				
	Location):	Fecha de entrenamiento (Training Date):	Date):	
	Nombre (Favor escriba su nombre) Name of Participant (Please print)	Firma del Participante Signature of Participant	X Trabajador(a) (Worker)	X Gerente (Manager)
1				
2				
3				
4				
5				
9				
7				
8				
6				
10				
11				
12				
13				
14				
15				

Enviar copia completada a (Mail a completed copy to): Heat Stress Prevention Program Manager, AFOP, 1726 M. Street Suite 602, Washington, DC 20036.

Certifico que la información en esta pagina es correcta. (I certify that the information on this page is accurate.)



### **HEAT STRESS PREVENTION TRAINING**

## Pre/Post Test

"Hello my name is, a	nd I am a Heat Stress Prevention trai	ner with	Today, I will be giving a
presentation to show you how you can prote	ct yourself from heat-related illnesse	s. Before and after the p	presentation, I will be
asking you several yes/no questions so that I	will know whether or not I am a good	d trainer—you can mark	your answers on this
paper that I have passed out. Keep in mind t	at this questionnaire is for me as a t	rainer—you will not be g	graded on this
questionnaire. Before we begin, please answ	er all of the questions about yourself	at the top of the paper	as I read them aloud to
you. If you don't understand a question, let n	e know, and I will explain it to you."	The trainer should wait	until everyone has
completed the top of the paper before contin	ing. "Please answer the following o	juestions on the front of	the paper. You will use
the back to answer questions after the prese	tation is over. Is everyone ready to	begin? I will repeat each	າ question twice. If you
need me to speak louder, just let me know."			

## PRE / POST TRAINING TEST

UEST	IONS	ANSWERS
1.	<b>Yes or No:</b> A person can become seriously ill, and even die, if his or her body becomes overheated.	YES
2.	<b>Yes or No:</b> Extreme thirst, a dry mouth, lightheadedness and irritability are all signs of heat exhaustion.	YES
3.	<b>Yes or No:</b> Someone in the fields who acts confused, slurs their speech and has hot, dry skin is probably just dehydrated and should take a short break.	NO
4.	<b>Yes or No:</b> To cool down someone suffering from heat exhaustion or heat stroke, you can move the person to the shade, loosen their clothing and splash them with water.	YES
5.	<b>Yes or No:</b> The best thing for a person suffering from heat exhaustion is an energy drink to help revive them.	NO
6.	<b>Yes or No:</b> If a person loses consciousness or does not improve after trying to cool him or her down, it is best to call for medical help	YES
7.	<b>Yes or No:</b> To prevent dehydration, you should drink one cup of water every hour while working.	NO
8.	<b>Yes or No:</b> By wearing loose-fitting, light colored clothing to work, you can lower your risk for a heat related illness.	YES
9.	Yes or No: It is always better to work alone in the fields.	NO
10.	<b>Yes or No:</b> A person with a chronic medical condition, such as high blood pressure or diabetes, will have a high risk for heat exhaustion.	YES
11.	Yes or No: Young children and pregnant women deal better with the heat.	NO
12.	<b>Yes or No:</b> Proximity to heavy machinery and heavy clothing can both increase the amount of heat you experience in a working environment.	YES



## **Heat Stress Prevention Training**

Pre/Post Test

	Please	answer the following q	uestions:	
<b>Sex</b> :Male	Female			
Age:				
How many years have	you been a farmworker?	Circle your answer		
less than 1 1	2 3 4 5 6	7 8 9 10	15 or more	20 or more more than 25
Education:				
None	Elementary (1-8)	_High School (9-12)	GED Some College	College degree
Have you ever heat st	ress prevention training b	efore today?	NOYE	S
How were you trained	<b>!?</b> With video/DVD	by a person	other	
Who trained you?	your boss	an AmeriCorps Memb	percrew leader	other
	Age:  How many years have less than 1 1  Education:  None  Have you ever heat st How were you trained	Sex:MaleFemale  Age:  How many years have you been a farmworker?  less than 1	Sex:MaleFemale  Age:  How many years have you been a farmworker? Circle your answer  less than 1 1 2 3 4 5 6 7 8 9 10  Education:NoneElementary (1-8)High School (9-12)  Have you ever heat stress prevention training before today?  How were you trained?With video/DVDby a person	Age:  How many years have you been a farmworker? Circle your answer  less than 1 1 2 3 4 5 6 7 8 9 10 15 or more

## **Before the Training (Pre)**

Circle the answer that you believe is correct

1	YES	NO	Don't know
2	YES	NO	Don't know
3	YES	NO	Don't know
4	YES	NO	Don't know
5	YES	NO	Don't know
6	YES	NO	Don't know
7	YES	NO	Don't know
8	YES	NO	Don't know
9	YES	NO	Don't know
10	YES	NO	Don't know
11	YES	NO	Don't know
12	YES	NO	Don't know

1



## **After the Training (Post)**

## Circle the answer that you believe is correct

YES	NO	Don't know
YES	NO	Don't know
	YES	YES NO

2

<b>★</b> OFFICIAL USE ONLY ★				
Trainer:			Date:	
Language of Training			State:	
	Pre # correct			
	Post # correct			



# Entrenamiento Sobre el Estrés por Calor (Pre/Post Test)

"Hola. Mi nombre es	Yo soy un(a) entrenador(a) y sirvo con _	Hoy, voy a dar una
presentación que les va a enseñar cóm	o se pueden proteger de las enfermeda	des causadas por calor. Antes y después
de la presentación, voy a hacerles algu	nas preguntas, a las cuales tienen que r	esponder "sí" o "no". Marquen sus
respuestas en el papel que he distribui	do. El propósito de estas preguntas es p	para saber si soy un(a) entrenador(a)
bueno(a). Acuérdense que este cuestion	onario es para evaluar mi capacidad con	no entrenador(a). No recibirán una nota
por sus respuestas en el cuestionario.	Antes que empecemos, por favor contes	sten todas las preguntas en la parte de
arriba del papel mientras yo las leo en	voz alta. Si no entienden una pregunta,	, avísenme y yo se las explicaré. Por favor
conteste las siguientes preguntas en la	parte de enfrente del papel. La parte d	le atrás se usará después que la
presentación se haya terminado. ¿Tod	los están listos para empezar? Voy a rep	petir cada pregunta dos veces. Avísenme
si tengo que subir la voz."		

PRE / POST TRAINING TEST		
1.	Sí o No: Una persona puede enfermarse, hasta morir, si su cuerpo se sobrecalienta.	SÍ
2.	<b>Sí o No:</b> Sed extrema, boca seca, debilidad y facilidad de enojarse son signos del agotamiento por calor.	SÍ
3.	<b>Sí o No:</b> Un trabajador en el campo que parece confundido, habla enredado y tiene la piel enrojecida y seca, a lo mejor está deshidratado y debe tomar un descanso breve.	NO
4.	<b>Sí o No:</b> Para refrescar a una persona que padece de agotamiento por calor o insolación, se puede mover a él o ella a la sombra, soltar su ropa y salpicarle con agua.	SÍ
5.	<b>Sí o No:</b> La mejor manera de ayudar a una persona que sufre de agotamiento por calor es darle una bebida energética para reanimarle.	NO
6.	<b>Sí o No:</b> Si una persona pierda consciencia o no mejore después de haberle ayudado enfriarse, lo mejor es llamar para ayuda médica profesional.	SÍ
7.	<b>Sí o No:</b> Para prevenir la deshidratación, debes tomar una taza de agua cada hora durante su turno de trabajo.	No
8.	<b>Sí o No:</b> Cuando usted lleva ropa liviana de colores claros, puede bajar el riesgo de sufrir una enfermedad relacionada al calor.	SÍ
9.	Sí o No: Es siempre mejor trabajar solo en el campo.	NO
10.	<b>Sí o No:</b> Una persona con enfermedad crónica, como la hipertensión o la diabetes, tiene mayor riesgo de padecer de agotamiento por calor.	Si
11.	<b>Sí o No:</b> Los niños y las mujeres embarazadas se acostumbran mejor que los demás personas al calor.	NO
12.	<b>Sí o No:</b> Trabajar cerca a la maquinaria pesada y poniendo ropa pesada pueden aumentar la cantidad de calor que usted experimenta en el lugar donde trabaja.	SÍ



# Entrenamiento Sobre el Estrés por Calor (Pre/Post Test)

	Por favor conteste las siguientes preguntas:
1.	Sexo:HombreMujer
2.	Edad:
3.	¿Por cuántos años ha sido un trabajador(a) agrícola? Circula tu contestación
	menos de 1 año 1 2 3 4 5 6 7 8 9 10 15años o más 20 años o más más de
	25
4.	Educación:
	NadaPrimaria (1-8)Secundaria (9-12)GEDAlgo de UniversidadGrado
	Universitario
5.	¿Ha sido entrenado alguna vez de cómo usted se puede proteger del calor antes de hoy?NOSI
6.	Si la respuesta a la pregunta anterior es SI, por favor complete las preguntas 6-8. ¿Cómo fue entrenado?
	con un video/DVDpor un entrenadorde otra mera:
7.	¿Quién le entrenó?Su patrónun miembro AmeriCorps Otra persona:

## Antes del Entrenamiento (Pre)

Por favor circule la respuesta que usted entienda es correcta.

1	Si	No	No sé
2	Si	No	No sé
3	Si	No	No sé
4	Si	No	No sé
5	Si	No	No sé
6	Si	No	No sé
7	Si	No	No sé
8	Si	No	No sé
9	Si	No	No sé
10	Si	No	No sé
11	Si	No	No sé
12	Si	No	No sé

1

## Después del entrenamiento (Post)

Circule la respuesta que usted entienda es correcta

		i e	
1	Si	No	No sé
2	Si	No	No sé
3	Si	No	No sé
4	Si	No	No sé
5	Si	No	No sé
6	Si	No	No sé
7	Si	No	No sé
8	Si	No	No sé
9	Si	No	No sé
10	Si	No	No sé
11	Si	No	No sé
12	Si	No	No sé

	* OFFICIA	AL USE ONLY *	
Entrenador		Fecha:	
Idioma del Entrenamiento		Estado:	
	Pre # correct		
	Post # correct		



# **Event Training Summary**

City /I seeties		Name of T		Data of Turbui		Navada a af a carlo to be trained	
Site/Location:		Name of T	rainer	Date of Traini	ng	Number of people to be trained	
Name of Comp		n or Cabooli		Post time to s	all.		
Name of Comp	any, organizatio	on or School:		Best time to c	all:	<del></del>	
				Office Phone	<del>!</del> ( )		
				Office Frione (	, ,		
Name of Conta	ct Person:			Cellular #	( )		
					· ,		
				Fax #	( )		
Mailing Addres	SS						
	·	,					
Indoor Site: (	(Please circle on	e)		Outdoor Site: (Please circle one)			
Chairs: Yes No			Shade: Yes No				
Table for Props	s: Yes	No					
Overhead & Ta		No			Nursery Orchard Other:		
Overneau & ra	bie. res	INU		Seating: Buckets Bins Benches Chairs Others Table for Props: Yes NO			
Type of training: How many participants		How many we		Has this grower used our Heat			
□ WPS	Б•	-	r the age of 16:	Male:		Stress Training before? (Please	
Heat Stress		c ugc 0. 10.	Female:		circle one)		
☐ Take Home					<del></del>	,	
						Yes No	
		=					
If not, how has	he/she trained	workers on He	at Stress?	How many farm workers spoke a language other than:			
☐ Crew leade	er 🗆 V	ideo	☐ None	Spanish or English:			
_							
<u> </u>		Which language:					
Power Point Other:							
Type of Group: (Please circle one) Field Worker Migrant Parents High School ESL Citizenship Class Adult School							
Recovery/DUI	Other						
Recovery/DOI	Other						
Starting	Ending Time	No. of	<b>Language</b> (Ple	ease circle one)	How many farm v	workers were receiving heat stress	
Time	J	Workers		•	training for the fi		
1st			Span				
			Engl				
2 <sup>nd</sup>			Span				
			Engl Span				
3er			Engl				
th			Span				
4 <sup>th</sup>			Engl				

#### Please answer all the questions below

#### Name and location of confirmed training:

**Estimated driving time from Office**: (please attach directions)

1.	. What training methods did you use? (circle all that apply)							
	Flip chart Role Play Power Point Props Video Demonstration Questions/Answers							
	Others:							
2.	What went well during the training?							
3.	What would you do differently?							
4.	How did the group size affect your ability to train well?							
5.	What obstacles did you encounter?							
_								
6.	How could you improve the situation next time?							
7.	What material, props or training aids would help you in the future?							
8.	What other health/safety training would you recommend this group?							



# Post-Training Employer Survey

Location/Name of Employer:	Name of Trainer:	Date of Training:	Number of people trained:		
Halla Advances to		h 4 - 4 4			
Hello. My name is(day/month	and I conducted a th). I am calling to ask a series of q	heat stress training with your wo			
won't take more than 5 minutes		, and the factorial of gauge	,		
1) Did you observe the heat stress prevention training session that was provided to your employees?					
2) What was your opinion of the	ne training?				
□Positive; Comments:					
□Negative; Comments:					
□Other; Comments:					
Following the training session, did you, or have you, observed any changes in behavior among those employees that received the heat stress prevention training?   No  Yes:					
☐Drink water more frequently	☐ Drink water less freque	ently	les of water		
☐Drink smaller quantities of wa	ter Take more frequent brea	aks   \tau \take	e fewer breaks		
□Work more frequently in pairs □ Work less frequently in pairs □ □Drink fewer sodas, energy drinks					
☐ Drink more soda, energy drinl	ks Drink more alcohol	☐ Drink less alco	hol		
□Wear more appropriate clothing (i.e. – light-weight, light-colored, cotton clothing, hat, bandana) □Wear less					
appropriate clothing (i.e dark-colored, heavy, shirts made of synthetic materials)					
☐ Other:					
Have you changed any of your policies following the training?  □No □Yes:					
Are there any additional observations or suggestions that you would like to make regarding the heat stress training that your					
employees received?					

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**Technical Consultation:** 

Don Melik, EMT Paramedic Fairfax County Fire and Rescue Virginia State-Certified Course Instructor, EMT

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