## How Can We Protect our Families from the Dangers in the Field?





#### Introduction

	What are you going to say when you arrive and want to begin the training?		
Note your ideas for how you will begin here:			

# **Protect Yourself from Pesticides**

#### What are Pesticides?

Have you heard about pesticides?

Pesticides are used to control damage to crops, like from insects and weeds, but they can also hurt or kill people.



#### What are Pesticides?

What are some examples of pesticides that you have used at home or at work?

*Note to the trainer: Let participants mention examples like Raid, Round-Up, etc.* 

#### **Examples of Pesticides**





#### Where are Pesticides? ¿How are they applied?

- Pesticides are applied as liquids or aerosols, in dust or granules, and as gases.
- If you work in the fields, nurseries, or greenhouses, you can be in contact with pesticides, many times without knowing.



Katie Langley

#### **Pesticide Residues**

- After pesticides are used in the fields, nurseries, and greenhouses, a small amount of pesticide remains, called "residue."
- You cannot always see or smell residue.
- For this reason, pesticide residues are dangerous you do not always know that they are there.



Rebecca Young

#### **Pesticide Residues**

Pesticide residues can accumulate on your clothes and your body while you work and you can carry these residues home without knowing it.



Rebecca Young

#### **How do Pesticides Enter the Body?**

Now that we have talked about residues, it is important to understand how they enter the body.

Do any of you know how this might happen?



## Activity

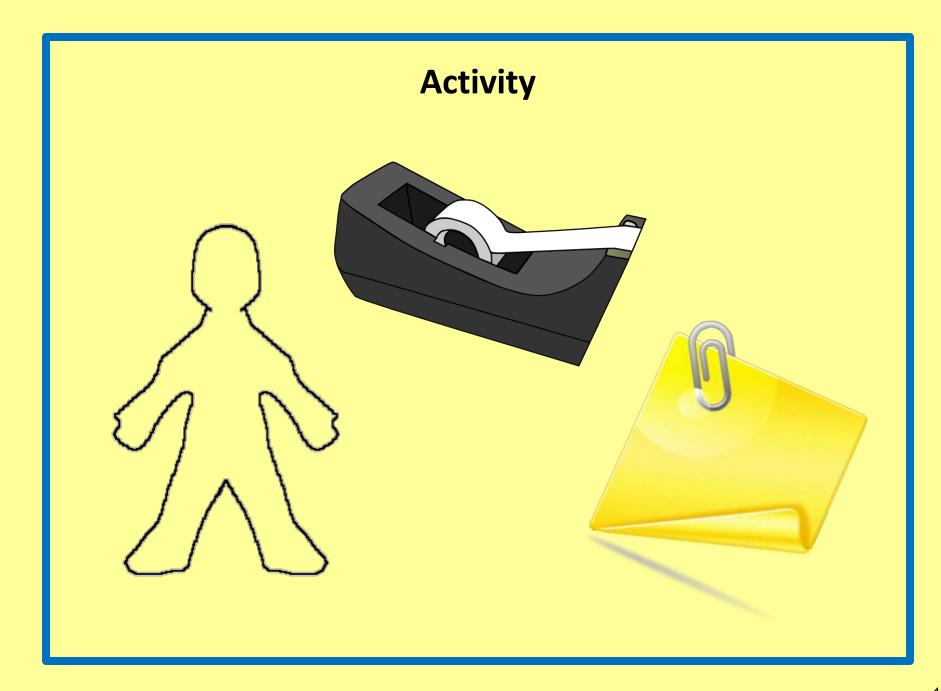
*Note to the trainer:* 

Sefore the training, draw a figure of a human body on a sheet of newspaper or flipchart.

**Stick the paper to the wall.** 

\*Ask participants to put a sticky note on each part of the body where pesticides might enter.

Materials: newspaper, markers, sticky notes, tape



## Activity

#### Ask:

Why did you put the sticky notes on these parts of the body?

How can the pesticide enter through each of these parts of the body?

Note to the trainer: Ask these questions for each part identified until they have mentioned: the mouth, the nose, the eyes, and the skin.









#### **Routes of Exposure**

**Pesticides can enter the body through:** 

The mouth while eating fruits and vegetables with pesticide residues.

**\*** The nose while breathing pesticide residues.





## **Routes of Exposure**

- Touching or rubbing your eyes while you are working in the field.
- Your hands and other areas of skin while you are in contact with pesticide residues.
- Pesticides can also enter the body while they are being applied, whether they spray directly on you or drift through the air from another field.

#### Can you think of other examples?





#### **The Most Common Route of Exposure to Pesticides**

What do you think is the most common way that pesticide residues enter the body?

Ask participants for their ideas and give the following explanation:

**\*** The most common way is through the skin.



Rebecca Young

#### **Acute Symptoms of Pesticide Exposure**

Have any of you felt sick because of contact with pesticides?

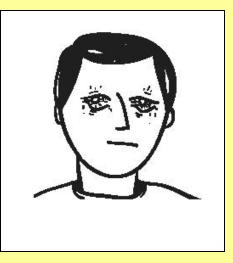
# All of these are acute symptoms that you can feel due to pesticide exposure.

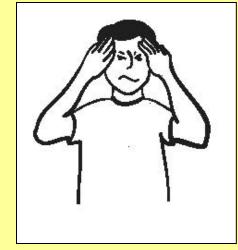
#### Note to the trainer:

- Use the same drawing of the body.
- Before the training, write out each of the acute symptoms (nausea, vomiting, headache, vertigo, fatigue, stomach cramps, excessive sweating, weakness) on colored index cards.
- Ask participants for their ideas of symptoms and give them the cards to put on the drawing as they say each symptom.

#### Materials: colored index cards, tape







#### **Serious Acute Symptoms**

Sometimes pesticides can affect you immediately and in a serious way. Do you know any of these symptoms?

- Difficulty breathing
- \* Loss of feeling
- ✤ Drooling
- \* Seizures
- \* Foaming of the mouth
- \* Confusion

Note to the trainer: Write these symptoms on colored index cards before the trianing and ask particpants to stick the index cards on the corresponding part of the body.

Materials: Colored index cards, tape, drawing of body



Earl Dotter

#### **Long-term Effects of Pesticide Exposure**

- It is possible that pesticide exposure will not affect you until after many months or years.
- Have you heard of illnesses that can be caused by pesticides?

Note to the trainer: Before starting, write the illnesses on colored index cards and ask particpants to put them on the drawing of the body.

Materials: drawing of the body, index cards, tape, markers



www.mckesson.com

## **Long-term Effects of Pesticide Exposure**

Like you all just mentioned, pesticide exposure can have longterm effects:

- **Cancers of the blood**
- Brian cancer
- Parkinson's disease
- Alzheimer's disease
- Birth defects
- \* Fertility problems
- Asthma
- \* Allergies



#### **More Long-term Health Effects**

- Pesticide exposure can cause problems for families, too.
- The bodies of children are still developing and pesticides can interfere with healthy development.
- How do you think your families can be exposed to pesticides?

Note to the trainer: Ask the farmworkers to think about how they can take residues home – on themselves (their shoes, clothes, hair, etc.), or by bringing home pesticide containers or extra pesticides for use at home.



#### **Seeking Emergency Medical Care**

What should you do if you start to feel sick at work because of pesticide exposure?

It is important that you receive medical care immediately.

Your boss is responsible for finding medical attention for you at a clinic or hospital as quickly as possible.



#### **Seeking Emergency Medical Care**

Your boss should provide information about the pesticide label to the doctor if the doctor asks for it.

Note to the trainer: Show an example of a pesticide label



pesticidepics.ext.vt.edu

#### **Seeking Emergency Medical Care**

If pesticide gets sprayed on your skin, clean it off as quickly as possible!

**\*** Remove the clothing with pesticides on it.



pesticidestewardship.org

#### If You are Sprayed Directly with Pesticides...

- Clean the skin with water. Use a hose with running water and soap if you have it, or bottled water.
- Change into clean clothes. Put your dirty clothing and shoes in a plastic bag and put it in a safe place.
- Get medical attention quickly.



#### **Seeking Emergency Medical Care**

- If you splash pesticides into your eyes, you need medical attention immediately.
- While you are waiting to receive medical attention, wash the eyes with water for 15 minutes. Use a hose, faucet, or a bottle of water.

Note to the trainer: Demonstrate how to correctly wash the eye, with head inclined backwards and using a hose or bottle of water.



economistmom.com



www.berkeleyside.com

## **Your Rights**

The "Worker Protection Standard" is a federal law that requires your boss to protect you from pesticide exposure.

#### By law:

Your boss has to provide you with a training on the safe use of pesticides if you are working in areas where they are being used.



### **Your Rights**

By law:

Your boss should warn you of the areas that are unsafe to enter where they have used or applied pesticides.

Your boss can do this by telling you not to enter certain areas because they have sprayed pesticides or by placing a sign that says: "Do Not Enter".

Note to the trainer: Show a sign that says "Do Not Enter" and ask the participants if they have seen a sign like this.



Earl Dotter

## **Your Rights**

#### By law:

- Your boss should not let you work in areas where they are applying pesticides or in areas where the wind can blow pesticide over you.
- Your boss should tell you how long to wait to enter a field after the pesticide has been applied, and this information is also on the label of the pesticide container.
- The time to wait is usually between 4 and 72 hours.



Sandy Hoyman

## **Your Rights**

By law:

- If pesticides make contact with your skin while you are working, your boss should have soap and water to clean it off.
- If you feel sick from pesticides, your boss should help you find medical attention.
- You should be able to follow these rules without any punishment from your boss.



http://upload.wikimedia.org

#### How Can You Protect Yourself from Pesticide Exposure?

What are some of the steps you can take to help reduce your exposure to pesticide residues?

Note to the trainer:

- Ask for a pair of volunteers.
- Ask that each one chooses, from the box of materials, the best clothing to use.
- If they feel comfortable with the idea, ask that they put on the clothing they chose over the clothing they are wearing.
- Ask the rest of the participants if they think the volunteers chose the best options.
- They should have boots, gloves, pants, a long sleeved shirt, a hat, etc.

Materials: box with work clothing



Katie Langley

## **Protection from Pesticides**

What are some of the things you can do to protect yourself from pesticides?

Note to the trainer: Ask the particpants to bring their ideas to the front and write them on a flipchart. The ideas should include:

- **Wash hands before and after going to the bathroom.**
- Wash hands before eating and drinking.
- **Take off work boots before entering the house.**
- Take a shower as soon as you arrive home.
- Separate your work clothes from the clothes of the rest of the family.
- Always wash fruits and vegetables before eating them.



www.thriftyfun.com



pesticidestewardship.org



larrysgroj.wordpress.com



www.scientiaweb.com



## **Hygiene in the Field**

**\*** Are there bathrooms where you work?

By law:

Your boss is required to provide clean bathrooms close to where you work and should permit you to take the time to use them.

Note to the trainer: Ask the particpants to share their experiences.



Rebecca Young

## **Hygiene in the Field**

Do you have soap and water so that you can wash your hands where you work?

By law:

- Your boss is required to have soap, water, and paper towels near the location where you are working and to permit you to use them without punishment.
- Your boss should provide sufficient and clean drinking water for each person.
- Drinking water should be close to where you work and there should be disposable cups.

Note to the trainer: Ask the particpants to share their experiences.



Rebecca Young

#### **Hygiene in the Field**

It is very important to have bathrooms that you can use frequently, soap, water, and paper towels so that you can stay healthy while you are working.



www.flickr.com/photos/yaxchibonam

#### **Review Questions**

Name a few examples of pesticides.

How can you protect yourself from pesticide residues?

What are some of the illnesses caused by pesticides?



Name some examples of pesticides.

How can you protect yourself from pesticide residues?

What are some illnesses caused by pesticides?

# Change

Mention a change that you will make to protect yourself or your family from pesticide exposure now that you have had this training.

Note to the trainer: Ask that each particpant shares something that he or she can do differently. Make a list of these ideas.

# Change

Mention a change that you will make to protect yourself or your family from pesticide exposure now that you have had this training.

#### Conclusion

Do you have any other questions?

I would like to thank each of you for coming today and for sharing in this presentation.





## Introduction

What are you going to say when you arrive and want to begin the training?
Note your ideas for how you will begin here:

# **Heat Stress**

#### **Heat Stress**

Have any of you heard about heat stress?

What do you know about heat stress?



#### **Heat Stress**

Heat stress occurs when the body becomes too hot.

It can happen quickly and be very serious.



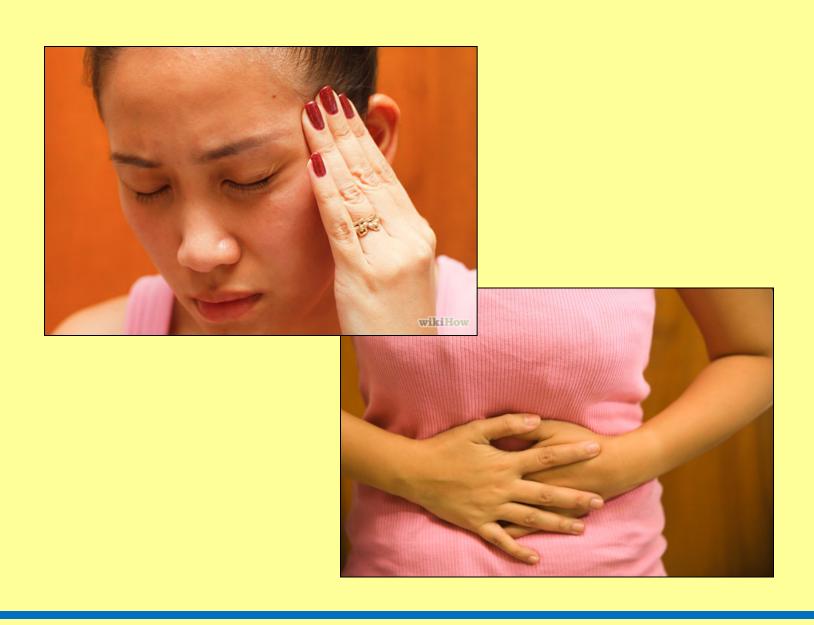
Katie Langley

#### **Symptoms**

How do you know if you have heat stress?

Sometimes the symptoms are very similar to those caused by pesticide exposure.

You can have a headache or feel sick to your stomach.



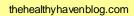
#### **Symptoms**

#### Have you heard of other symptoms?

#### You can have...

- Rashes
- Weakness
- Sweating
- Extreme thirst







#### **Health Risks**

Heat stress can rapidly become something very serious.

If you don't treat it in time, it can cause problems – sometimes very serious health problems, including death.

Have any of you experienced heat stress?



There are steps you can take to prevent heat stress.

Do you have ideas about what they are?



**\*** Take breaks in the shade during the day.

Begin working early and take a break during the hottest part of the day.

Drink water before, after, and during work.



www.capitalpress.com

You should drink at least a quarter of a gallon of water during each hour of the day.

The water should be close to where you are working.



www.hardwarestore.com

What kind of clothes should you wear to protect yourself from heat stress?

*Note to the trainer:* 

- \* Ask for a volunteer.
- Ask the other participants to tell the volunteer what he or she should wear to prevent heat stress.
- Ask the other participants to choose clothing from the box and the volunteer can put the clothing on and show the group.

Materials: box of clothing



Rebecca Young

- Cotton shirts with long sleeves, cotton pants, and a hat with a wide rim can protect you best!
- Be sure to keep wearing boots and gloves to protect yourself from pesticides.



www.sfgate.com

#### **Treatment of Heat Stress**

What should you do if you or someone else is experiencing symptoms of heat stress?

Note to the trainer: Ask participants for their ideas about what to do...



hearmyhandsasl.blogspot.com

#### **Treatment of Heat Stress**

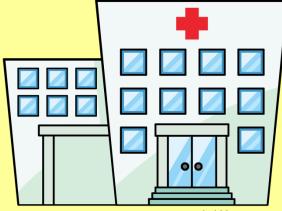
- Move to a shaded area.
- Loosen or take off clothing.
- Drink water.
- Put cool water on the body especially on the chest.
- **SEEK MEDICAL ATTENTION!**



Jesus López



complianceandsafety.com



www.bubblews.com

#### **Heat Stress and the Law**

How can the law help to protect you from heat stress?

By law:

- Your boss should provide sufficient and clean drinking water for each person.
- Drinking water should be close to where you work and there should be disposable cups.



#### **Heat Stress and the Law**

In California:

- Your boss should give you a training about heat stress.
- Your boss should pay you for the time you take to participate in the training.
- Your boss should provide a place with shade when the temperature is 85 degrees or more.
- You have the right to take a break in the shade for at least 5 minutes if you need to.

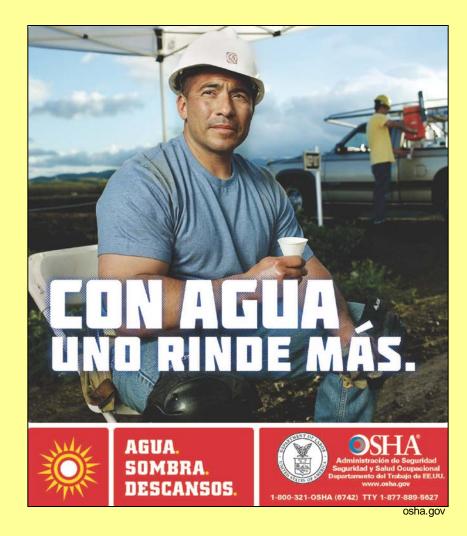


lohp.gov

#### Activity

Many people think that it takes too much time to take a break and drink water.

Note to the trainer: Ask participants to give their opinions.



### Activity

Note to the trainer:

Ask for a volunteer.

Fill a small cup with water.

Ask the volunteer to drink the water normally.

Note the time it takes to drink the water.

#### \* Ask participants: Did it take much time to drink the water?

- Tell them how much time it took.
- Explain that taking a break and drinking water doesn't have to take much time.

Materials: small cups, plastic bottle with a quarter of a gallon of water, watch



#### **Review Questions**

What is heat stress?

How can you protect yourself from heat stress?

What should you do if you feel symptoms of heat stress?



What is heat stress?

#### How can you protect yourself from heat stress?

# What should you do if you feel symptoms of heat stress?

#### Change

Mention a change that you will make to protect yourself from heat stress now that you have had this training.

Note to the trainer: Ask that each particpant shares something that he or she can do differently. Make a list of these ideas.

## Change

Mention a change that you will make to protect yourself from heat stress now that you have had this training.

#### Conclusion

Do you have any other questions?

I want to thank each of you for coming today and for sharing in this presentation.







1126 16<sup>th</sup> Street, NW, Suite 270 Washington, DC 20036 (202) 293-5420 fj@farmworkerjustice.org www.farmworkerjustice.org

#### 2013

This flipchart, entitled "¿Cómo Podemos Proteger a Nuestras Familias de los Peligros en el Campo?" was developed as a presentation and guide for promtores de salud who provide health education to farmworkers. The promotores receive a two-day training using the curriculum, entitled *Pesticide Hazards, Field Sanitation, and Heat Stress for Farmworkers: A Training Curriculum for Lay Health Educators.* 

The curriculum and materials, developed and revised by Farmworker Justice from 2010 to 2013, were created for the project, "Institutionalizing Capacity to Improve Occupational Safety and Health of Farmworker Communities Nationwide."

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