EFFECTIVE TRAINING TECHNIQUES

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Presenting Effective WPS Training

Developing and presenting Worker Protection Standard (WPS) training classes can be a challenge, especially since pesticide safety is a serious subject. It is not only important the information provided to workers and handlers is accurate, but it also must be presented in a manner that is easily understood and maintains their attention. Obtaining accurate information can be easy, but in order to make your training effective and interesting, you should understand the difference between passive and interactive training techniques.

Passive Versus Interactive Training Techniques

Passive training requires little or no active exchange between the trainer and the trainees. Lectures, reading assignments, and audiovisual presentations can all be passive techniques or tools, because they don't require active participation by the trainees. It is difficult for trainers to



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monitor trainees' concerns or knowledge about the topic when only passive techniques are used.

Interactive training includes techniques that encourage trainees to participate in activities or discuss the topic. Training is more effective and enjoyable for the trainees when they are directly involved in the learning process. Examples of interactive training include discussion, hands-on activities, role-playing, and games.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Choose the training technique that is best suited for your training objectives, the training site, number of participants, and the time you will have allotted to conduct the training.

Examples of Interactive Training Techniques

The following information is a description of several interactive training techniques. Advantages, limitations, and tips are included to help you decide which methods will work best for your training sites and situations. Finally, activities are included as examples of how each technique could be used in WPS training.

Discussion

The easiest way to turn a lecture into an interactive training session is to combine your presentation with a discussion or a question and answer session. This allows trainees to participate in the training, and helps you monitor how well they understand the information.

Advantages

- Discussion sessions allow trainees to be directly involved in the learning process.
- Trainees have the opportunity to share previous experiences and knowledge that may bring new ideas and information to the course.
- When trainees are asked questions or invited to share their ideas, they are more likely to maintain interest and pay attention to details.



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Limitations

- Discussion sessions can be time consuming especially if group members stray from the main topic.
- Even if encouraged to participate, some trainees may be hesitant to share their experiences or knowledge, while others dominate the discussions.

Tips for Discussions During Training. Some trainees may have had prior pesticide safety training or experience with pesticides and will be familiar with the subject. If so, take advantage of this knowledge. Ask these trainees questions, and let them provide the answers. You can follow by asking other group members if they have additional information they would like to add. This will allow knowledgeable trainees to take part in the teaching process and will encourage others to do the same.

Ask questions that will lead trainees to the correct conclusions and encourage everyone in the group to participate. Create questions that encourage discussion instead of a simple "yes" or "no" response. Questions that encourage discussion begin with words such as "who", "what", "how", "which", or "why." For example, the question, "What are some of the ways that people can come into contact with pesticides or pesticide residues?" prompts trainees to list different areas around their workplace or home where they might encounter pesticides.

Allow trainees a moment to think and respond to your questions before providing the correct answer. If someone provides an incorrect answer, politely correct the misinformation.

Reinforce key points by repeating some of the concepts that were discussed in the session. Writing these points on flip chart paper or a dry erase board might encourage others to add their ideas to the list and helps to keep the discussion on track. This list can also assist you when summarizing the topic at the end of the session.

Topic Ideas for Discussion Sessions

- 1. Routes of Entry
- 2. Steps to Prevent Pesticide Exposure at the Worksite
- 3. Preventing Pesticide Exposure at Home
- 4. Routine and Emergency Decontamination
- 5. The Role Weather Plays on Pesticide Applications
- 6. Risks to the Environment
- 7. Pesticides Used at Work
- 8. Pesticide Formulations

Sharing Personal Experiences

When focusing on a specific aspect of pesticide safety you can take advantage of trainees' knowledge and experiences. Sometimes sharing a personal experience drives a point home better than simply explaining the steps to take or warning trainees about the consequences of a particular action.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Advantages

- Recounting personal experiences tends to be interesting for everyone.
- Storytelling emphasizes the importance and reality of the issue when trainees hear stories from their peers.
- One person's experience may cause other people to recall similar experiences, which can stimulate more discussion.

Limitations

- This technique can be time consuming if several people want to share their experiences, one person has an exceptionally long story to tell, or the stories lead to discussion on other issues.
- Trainees may be hesitant to share a story, especially if their employer is present.

Tips for Using a Personal Experience During Training. Present the point you want to cover, and then ask if anyone in the training is familiar with a situation that relates to the topic. If someone has had a similar experience, ask the person if they would like to tell the group about the situation and its outcome. Prepare your own story or a story you have heard as a backup in case no one has a personal experience to share.

Make sure this activity relates to the points you are trying to cover. If the trainees begin to stray from the point, assure them their stories are very interesting but it is important to keep the discussion focused on the topic.

Don't let too many people tell their stories at the same time. Have the group listen to one story and then lead discussion related to it before going on to the next story. Always thank people for sharing their experiences with the group.

Topic Ideas for Sharing Stories or Personal Experiences

- 1. Pesticide Exposure Situations
- 2. First Aid for Pesticide Illnesses and Injuries
- 3. Environmental Hazards
- 4. Pesticide Spill Clean-up Procedures
- 5. Cleaning Clogged Nozzles
- 6. Pesticide Application Equipment Safety Measures
- 7. Experiences with Application Exclusion Zones

Images

A good way to get trainees to analyze a situation or resolve a problem is by showing images in combination with the discussion technique. You can find photos and drawings that relate to pesticide safety or exposure situations by searching for images on the internet, in agricultural magazines, general safety publications, and EPA-approved training materials.

Advantages

- This technique allows trainees to visualize a situation.
- It is an effective way to introduce a topic before analyzing or discussing it.

Limitations

- Locating appropriate photos or drawings may be difficult and time consuming.
- Poor picture choices may be offensive to the trainees or may cause them to draw the wrong conclusions about the situation.

Tips for Using Images During Training.

Select images related to the work of the trainees. For example, if you will be training at a fruit or vegetable farm, choose pictures of people working in row crops or orchards. If you will be training at a golf course, nursery or forest, choose images that more closely depict those agricultural production areas.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Make sure the images are big enough for everyone to see them, and do not stand between the trainees and the picture. If you will be training a large group, photocopy or tape the images onto card stock and ask volunteers to hold up the images and walk around the room to show each person individually. If you have access to electricity, a laptop, and projector, you can also project larger images onto a screen or light-colored wall.

Finally, allow trainees enough time to think about the situation depicted in the image before asking them to analyze and discuss it.

Topic Ideas when Using Images

- 1. Situations that Could Result in Pesticide Exposure
- 2. First Aid for Pesticide Illnesses and Injuries
- 3. Routes of Entry
- 4. Environmental Hazards
- 5. Application Exclusion Zones
- 6. Parts of the Pesticide Label
- 7. Pesticide Spill Clean-up Procedures

WPS Flipcharts

An EPA-approved WPS portable flipchart is available, which covers the information required for WPS worker training. The flipchart allows workers to see the drawings on the front of each page while the trainer uses the descriptive safety training text in a trainer guide or on the back of each page of the flipchart. The text includes training objectives, a script with the required information, and review questions for you to ask trainees after each section.

Advantages

- WPS flipcharts are portable and can be placed on a table, a truck tailgate, or over your arm.
- The flipchart is a great tool for WPS training in a field, on a bus, or any area without access to electricity.
- Flipcharts are available in a 3-ring version, which enables trainers to remove and rearrange the pages in an order they prefer.



Photo courtesy of J. Hollyer, University of Hawai'i at Mãnoa.

Limitations

- Small WPS flipcharts are only practical for training a small group of 10 workers or less.
- Due to the flipchart design, some trainers may simply read the text from a script or the back of each page, rather than make eye contact with the workers and engage them in training.

Tips for Using the WPS Flipchart During Training. Study the information included in the script so you can speak to the group instead of reading the text directly from the flipchart. Maintain eye contact with the trainees so you don't give the impression that you are simply reading to them. Use the questions included in the text and encourage them to ask additional questions and make comments during the presentation. Only use the small flipchart if you are working with a small group so everyone can see the drawings.

Discussion Point Ideas when Using the WPS Flipchart

- 1. Routes of Exposure
- 2. Routine Decontamination Procedures
- 3. Ways to Prevent Exposure
- 4. Laundering Work Clothing at Home
- 5. Application Exclusion Zones
- 6. Field Posting Signs and Oral Warnings about Applications
- 7. Central Posting Area and Safety Data Sheets

Audiovisual Tools - Videos/DVDs, and Digital Presentations

Many instructors like to use videos or DVDs and digital slides (i.e., PowerPoint®) to combine visual and discussion techniques.

Advantages

- Videos/DVDs and digital presentations allow trainees to see and hear the information presented.
- A digital presentation can be designed to serve as your presentation outline, which can make it easier for you to stay on track.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

- A video can help instructors cover several important points in a short amount of time.
- Videos/DVDs and digital presentations can be used very effectively as interactive training tools when combined with other training methods and activities.

Limitations

If used in a passive manner, audiovisual presentations limit trainees' chances of taking an active role in the learning process.

When an instructor shows an audiovisual presentation without interruption, trainees are unlikely to retain all of the information.

There may be little opportunity to clarify the information or answer trainees' questions during the presentation. By the time the presentation has ended and the instructor invites the trainees to comment and ask questions, they may have forgotten questions they had while watching the video.

Audiovisual presentations usually require a dark room, which may be difficult to find. Trainees may also fall asleep during the video if the room is too dark.

Tips for Using Audiovisual Tools During Training. Resist the temptation to just let the video or digital program do the training. These audiovisual tools can be more effective when combined with interactive teaching methods.

Interrupt the presentation and lead a discussion following each section. This will allow you to gauge the understanding of the information being presented, or to get trainees' feedback on the key points. Trainees are more likely to stay alert during an audiovisual presentation if they are frequently called upon to comment on or ask questions about the information that they have just viewed. This also allows trainees to discuss issues that are still fresh in their minds, or share their own experiences related to the topic.

There are many reasons to review your video or Digital presentation before training. Use that time to decide where you will pause the program to initiate discussion and to make sure the information is accurate. Since laws and regulations can change, you must make sure the information in the audiovisual presentation is accurate. Also, many pesticide-related videos contain information about federal regulations, but you may also have to provide trainees with information on state or local requirements.

You may occasionally find something in a video that you believe is misleading, incorrect, or inappropriate for your area. At the end of the section you can use these inconsistencies to generate discussion, but make sure trainees understand which information is correct and which is incorrect. If there is work-specific or state-specific information that was not covered in the presentation, remember to cover this information in your class discussion.

Topic Ideas when Using Audiovisual Tools

- 1. Parts of the Pesticide Label
- 2. Selecting PPE
- 3. Triple-Rinsing Pesticide Containers
- 4. Cleaning up Pesticide Spills
- 5. Application Procedures
- 6. Cleaning up at the End of the Work Shift
- 7. How to Protect Family Members from Pesticide Exposure

Case Study

Another interactive training tool is the case study. A case study involves a story and a series of questions to help identify or solve a problem. You can write a fictitious story or base a story on a real experience. Questions follow the story to help trainees think about the situation and lead them to the right conclusions.

Advantages

 A case study helps trainees identify and solve problems through discussion and participant feedback.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

 Case studies can be easy to create and can be used to make several points with one story.

Limitations

- It may be time consuming to create a case study that addresses all of the points you want to cover.
- It can be challenging to develop appropriate questions that lead trainees to the right conclusions.
- You may need to make sure the trainees do not misinterpret or stray from the main points of the story.

Tips for Using a Case Study During Training. Begin with a clear idea of what you want to communicate before writing or selecting a story. Write a story or select a scenario from a newspaper article or regulatory agency case that could actually happen to the people you are training. Give your characters names to help trainees identify with them.

When creating questions to follow the story, make sure they lead trainees toward the right conclusions and discussion rather than a simple "yes" or "no" answer. This will allow trainees to fully analyze and solve the problem.

Topic Ideas for Case Studies

- 1. Employers' Responsibilities
- 2. Employee Rights
- 3. Responding to Pesticide Illnesses and Injuries
- 4. Heat Stress
- 5. Application Exclusion Zones
- 6. Restricted-Entry Intervals
- 7. Failing to Follow Pesticide Label Instructions

Role Play

Role play involves a situation trainees act out to address a particular issue or topic. Role plays can be created to examine several issues or can be used as a hands-on activity for practicing important skills, such as first aid.

Advantages

- Role play encourages interactive involvement in the training process.
- By acting out roles, trainees may become aware of their own attitudes and concerns and may remember more details about the topic than they would if they were listening to a lecture or reading the information in a booklet.

Limitations

- A role plays takes time and may require the use of props.
- A role play may be ineffective if trainees are uncomfortable acting in front of a group.

Tips for Using a Role Play During Training. Keep the scenarios simple by limiting the number of characters, props, and messages.

Provide "actors" with thorough descriptions or pictures of the scenes they will present to the group and encourage actors to respond as if they were in a real situation.

Leave time for discussion following each scenario. Make sure you know the points you want to address for each scene so you can clarify or correct any misinformation at the end of the activity.

Topic Ideas for Role Plays

- Recognizing Pesticide Exposure Symptoms
- 2. First Aid for Pesticide Exposure
- 3. Spill Clean-up
- 4. Employers' Responsibilities
- 5. Employee Rights
- 6. Heat Stress



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7. Attitudes about the Importance of Pesticide Safety

Hands-on Activities

Hands-on activities provide trainees with the opportunity to develop, practice, or master a skill.

Advantages

- Hands-on training can be designed to enable a group of trainees with diverse educational backgrounds, languages, and literacy skills to participate on the same level.
- When trainees practice skills they are likely to remember the information or skills involved in the activity.

- You will be able to gauge the trainees' knowledge before training and their comprehension of information during training.
- Hands-on activities keep trainees engaged and awake during training.

Limitations

- Hands-on training activities can be time consuming.
- They may also require additional props and materials.
- You must monitor the activity to make sure it is demonstrated correctly.
- Trainees may be unsure and need guidance.

Tips for Using Hands-on Activities During Training. Practice the techniques you will teach prior to training to make sure that you know how to demonstrate them and that the props work correctly.

Make sure everyone can see and hear what is happening and has an opportunity to participate. Find a place reasonably quiet and free from distractions.

It is also very important trainees learn the correct skill or response. Pause periodically to ask for comments, questions, or critiques.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Topic Ideas for Hands-on Activities

- 1. Selecting PPE Listed on the Label
- 2. Cleaning Up a Pesticide Spill
- 3. Inspecting Equipment Prior to Use
- 4. Mixing and Loading Pesticides into a Tank
- 5. Responding to Pesticide Exposure
- 6. Finding Information on Pesticide Labels and Safety Data Sheets (SDS)
- 7. Triple-Rinsing Pesticide Containers

Fluorescent Tracer Powder or Lotion

A very popular pesticide safety training tool is the fluorescent tracer, a non-toxic substance available as a powder or lotion. The fluorescent tracer is not visible in normal lighting, but glows brightly under a black light.

Advantages

- This is a great visual training tool that shows immediate effects.
- It is portable and economical.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Limitations

- In order for the tool to be effective, you must have access to an area that can get dark enough to see the fluorescent tracer under a black light.
- You will have to provide trainees a place to wash the tracer off after the activity.
- You may also have to clean tables, equipment, or other items used during the activity.

Tips for Using Fluorescent Tracer During Training. Before including a fluorescent tracer activity, make sure you have access to an area dark enough to show the tracer under a black light.

Explain that the substance is not toxic and is only being used to simulate a pesticide during the training.

Make sure everyone can either participate or see what is happening during the activity by inviting them to the front of the class when you are shining the black light on the individual, props, or surfaces.

Topic Ideas when Using Fluorescent Tracer

- Importance of Washing Hands Before Eating, Drinking, Smoking or Using the Restroom
- 2. Pesticide Residue Transfer to Items Such as Cellphones, Keys, and Boots
- 3. The Importance of Proper Cleaning, Use, and Removal Of PPE
- 4. Pesticide Residues on Produce
- The Importance of PPE for Mechanics who Repair or Clean Pesticide Application Equipment
- Pesticide Residue Transfer from One Person's Hands to Other People or Surfaces
- 7. Pesticide Drift

Games and Quiz Shows

When you are training people who have attended pesticide information courses, or who believe they already know enough about the subject, it may be difficult to keep their attention. Games can turn what seems like a boring session into an interesting and enjoyable training experience. Games and quiz shows can also be used at the end of a training session to see if trainees have retained the information you presented.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Advantages

- Games can be an enjoyable way to cover a topic because they are interactive and can generate enthusiasm.
- Participants may pay attention because they want to "win."
- A game gives trainees a chance to show what they've learned while trainers gauge whether they have achieved their training objectives.

Limitations

- Designing a game may require a lot of preparation time and materials.
- Playing a game during a workshop can be time consuming.
- The enthusiasm a game generates can be disruptive in certain training locations and may require you to keep the situation under control.

Tips for Using Games and Quiz Shows as a Training Technique. Set aside time to prepare and play the game. Games are more effective if you wait until the end of a training session to play them. This will allow you to be a little more flexible with your time and will also help you determine if trainees have learned what you taught them in previous sessions.

When playing a question-and-answer game, make sure your questions help the participants retain or repeat the information you want them to learn. Providing prizes, such as candy, hats, or gift certificates, to trainees who answer questions correctly may provide them an extra incentive to concentrate and participate in the activity.

If you don't have the time, materials, or ability to build a game board, there are several Digital game show templates that can be downloaded from the Internet for free. Game templates include Jeopardy, Survivor, Cash Cab, Spin-the-Wheel, and Are you Smarter than a 5th Grader? You can also make simple and inexpensive word games to review information on pests and personal protective equipment.

Ideas for Game and Quiz Show Categories

- 1. Care and Maintenance of PPE
- 2. Pesticide Exposure Scenarios
- 3. Environmental Hazards
- 4. Parts of the Pesticide Label
- 5. Responding to Pesticide Emergencies
- 6. Laws and Regulations
- 7. First Aid for Pesticide Exposure
- 8. Transporting, Storing and Disposing of Pesticides and Their Containers