

Appendix

This is an excellent guide developed by the Alameda County Public Health Department (www.acphd.org). We encourage you to read through it before conducting your own training. It provides useful tips and advice on how to improve your training skills and conduct a successful training.

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APPENDIX

Train the Trainer Train the Trainer: Basic Training Guidelines

"There is nothing training cannot do. Nothing is above its reach. It can turn bad morals to good; it can destroy bad principles and recreate good ones; it can lift (wo)men to angelship."
- Mark Twain

An excellent training is nothing without an excellent trainer. This section of the binder covers basic guidelines and tips to help improve your training skills. The following areas are covered:

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Each chapter's font color as shown above corresponds with the color tab on the outside of the pages for that chapter. Icons are used throughout this handbook to alert you to important information.

Icon Key			
	Topics Covered in the Section		Important Hints to Remember
	Important Tips to Remember		Steps to Follow
	Important Areas of Caution to Remember		Link to a Website

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Preparing for the Training

Effective trainings take practice and planning. This section offers tips on the following preparation activities:



- **Personal Preparation**
- **Joint Preparation with your Co-Trainer**

Personal Preparation

The best trainings are no accident – they are the result of the trainer spending hours familiarizing herself with the material. Here are some guidelines to help you assess if you know the material well enough to deliver a powerful training:



- **Take the time.** The standard preparation time is three hours for every hour of training. It seems like a lot, but it's worth it in the end.
- **Learn the material.** Know the material inside and out and make your own notes about the information so you can use the Module power point presentation as a resource, not a crutch, and can answer questions correctly. Unless absolutely necessary, do not read while presenting!



HINT: *Going over the recommended readings for your module will improve your content knowledge and the chances you will be prepared to answer unexpected questions.*

- **Use your own words.** The training will be more interesting for participants, and you will be more confident if you know the salient points well enough to be able to express them with your own unique style.
- **Use your experiences to illustrate the point.** Personalizing information with your own your own anecdotes or other tactics will enhance the impact of the slides and handouts.

Joint Preparation with your Co-trainer

Just like working on any team, getting comfortable with your co-trainer takes time and energy. Neglecting to build your training team and clearly define roles can lead to power struggles and land you in sticky situations during the training. Avoid embarrassing yourselves and alienating participants by meeting with your co-trainer at least *one week prior to your training*, to establish who will do what and divide-up the Module's sections.

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Preparation



HINT: Make sure to discuss each others' preferences for how to support one another in the classroom. For instance, some trainers don't mind their co-trainer interjecting an example or story here and there, or responding to participants' questions even when it isn't their turn to teach, while others feel offended by such behavior. There are no right or wrong preferences; the key is to discuss them in the preparation phase, not in front of the class!

The following are some questions you should discuss with your co-trainer:



- ✓ How do you want to divide-up the Module?
- ✓ Do you mind if I interject with my own anecdotes, ideas or responses to questions while you are teaching?
- ✓ Do you mind if I prepare the materials for the next section of the Module while you are teaching?
- ✓ Do you want me to keep notes while you lead discussions?
- ✓ If we need to speed through a section of the Module because we are running short on time, which section should we abbreviate?
- ✓ How can I best support you?
- ✓ When the Module is over, when can we meet to debrief and give each other feedback?



Bite Your Tongue! As hard as it may be, withhold all constructive criticism or corrections you may have for your co-trainer until after the training is over and you have a chance to debrief in private. Never undermine your co-trainer's credibility in front of the class, unless what they have said is offensive or wildly erroneous. Even in such situations, try to reframe what your co-trainer has said in a positive and clarifying manner.

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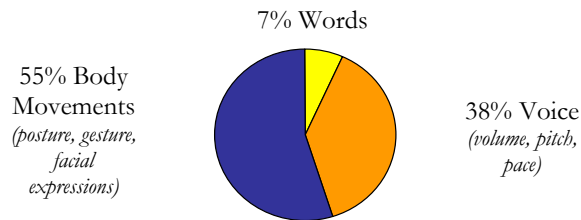
Preparation

Establishing Confidence

As the graph below demonstrates, much of what is communicated during a training is through the demeanor of the trainer herself. A trainer confident in both her words and her body language will be more effective in persuading the participants to trust the material. This section covers two important ways to make sure you are a confident trainer:



- Demonstrating Your Credibility
- Minimizing Your Stage Fright



Demonstrating Your Credibility

There are seven common steps you can take to ensure the participants view you as credible trainer. The steps are:



- ✓ Always be honest with the participants. If you don't know the answer to a question, don't make one up.
- ✓ Make your presentations balanced and as free from bias as possible.
- ✓ Make sure the audience knows you are the expert.
- ✓ Raise questions about the information yourself.
- ✓ Support the information with your own facts and experiences.
- ✓ Cite authorities that are accepted by your audience.
- ✓ Invite questions from the audience.



HINT: Remember, for all of these steps, it's not just what you say, it's how you say it: stand-up straight, speak with a big voice, and resist folding your arms across your chest.

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Minimizing your Stage Fright

If you are afraid of public speaking, you are not alone. Public speaking is the first on the list of U.S. residents' top ten worst fears.* The following tips can help you overcome your stage fright.



- **Remember, you know the material.** Increase your confidence by reminding yourself that you and your co-trainer are well prepared.
- **Release Tension.** One of the best ways to do this is take deep breaths. Breathe from your diaphragm and remember to exhale all the way. It also helps to exercise regularly, as unused energy may come out as anxiety.
- **Rehearse.** After you have mastered the material, practice the presentation until you feel confident. Before giving the presentation, visualize yourself succeeding. If you imagine success you are more likely to be successful.
- **Know the room and your equipment.** Finish testing your audio visual equipment and by completely set up by the time participants arrive.
- **Know the participants.** Talk to them as they arrive – it is easier to speak in front of people you are familiar with than a group of strangers.
- **Reassure Yourself.** The participants are not there to see you perform; they are there to learn the material. People are not scrutinizing you or waiting for you make a mistake. Most likely, they want you to succeed because that means an interesting training for them.



HINT: Don't apologize for your nervousness or mistakes; just keep moving through the material. Apologizing can call the audience's attention to something they didn't even notice.

- **Re-frame.** Feeling nervous and feeling excited are very similar. Harness your nervous energy and turn it into enthusiasm.
- **Resist imitating another's style.** Be natural and relaxed. Only use others' techniques if you can do it without thinking. Concentrating on presenting like someone else takes your focus away from the material, which creates anxiety.
- **Know your first line and the transition to the main point.** Memorizing the introduction to the training can dissipate anxiety and help you begin with confidence.
- **Concentrate on the message, not yourself.** Try as hard as possible to turn your attention outward. Focus on what you are there to do: engage the participants in the material so they can learn.
- **Rest up and eat well.** Training requires a lot of energy, enthusiasm and focus. Being on your toes for several hours can be mentally and emotionally exhausting, so get plenty of rest and nutrition so that you are physically and psychologically alert.

* David Wallechinsky, et al. *The Book of Lists* (New York: Wm. Morrow & Co., Inc., 1977).

Setting the Tone

Trainers have the opportunity to set the tone for the training. This section covers the following areas that will help you establish an open and honest learning environment:



- Greeting
- Ice Breakers
- Ground Rules

Greeting

A person's first impressions of trainings can shape her or his whole experience. That is why it is important to finish setting up a few minutes early and be ready to greet participants as they enter the room.



- ✓ Introduce yourself.
- ✓ Invite participants to help themselves to refreshments.
- ✓ Ask participants to create name tags.
- ✓ Make sure they sign the participants' class list and the lists for relevant Continuing Education Units (CEUs).

Breaking the Ice

Ice breakers are short activities that get participants energized and feeling comfortable with each other. They also help set an enthusiastic tone for the training and can help ensure that participants are actively engaged. The following are tips to keep in mind as you decide what type of ice breaker to use:



- **Know your audience.** Before deciding which activities to use, consider physical abilities.
- **Be very flexible.** Make sure you are using an ice breaker that can be adapted to the group if needed.
- **Participate enthusiastically.** Only choose ice breakers you are willing to be part of. Sharing something about yourself helps establish your credibility as well.



HINT: Examples of ice breakers you can use in your trainings are found in Appendix A. However, an internet search for ice breakers will give you many more rich options. The following link has good suggestions for ice breakers to use with adults:
<http://www.eslflow.com/ICEBREAKERSreal.html>

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Everyone must participate. If a participant is uncomfortable with the ice breaker, decide on another way she or he can share something with the group. One idea is to ask the participant to complete the sentence, “If you really knew me, you would know that I...” This is a simple and safe way to introduce oneself. The only exceptions to the participation rule are latecomers. However, as soon as possible after people arrive late, take a moment and them to say their names and any other information you feel they need to share for everyone to feel comfortable and equal.

Ground Rules

Before beginning the training, set some ground rules. Ground rules establish the way participants interact with one another during the training. You can also use them to defuse or redirect difficult situations by stating, “Please rephrase your statement taking into consideration our ground rules.” The ground rules do not need to be extensive. Some sample ground rules are:*



- ✓ Cherish diversity.
- ✓ Keep an open mind.
- ✓ Everyone participates; give priority to those who have not spoken.
- ✓ Return from breaks on time.
- ✓ Silence means consent.
- ✓ Be open and honest.
- ✓ We are all experts and we are all learners.
- ✓ Listen and process what others are saying.
- ✓ No side conversations.
- ✓ It is okay to disagree – but do not be disagreeable.
- ✓ There are no right or wrong answers; all responses are valued.
- ✓ Respect one another.

You can either allow participants to come-up with their own ground rules or prepare a list of ground rules in advance, which usually takes less time. If you devise the ground rules in advance, make sure to ask participants if there is anything they would like to add. This allows participants to feel that their voices are heard. Either way, make sure that the ground rules are posted in the room throughout the training, in case you need to refer to them.



HINT: *There may be additional information about ground rules you need to consider for your Module. Please remember to keep an eye out for information on specific ground rules as you review the supplemental training guide for your module.*

* Many of the sample ground rules are taken from the CAPE “Focus Group Training Manual,” January, 2006

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Setting the Tone

Facilitating Discussion

D. Facilitating Discussion

Trainings that are interactive, such as PH 101, are more effective than lectures because the participants' involvement and experiences are actually a part of the learning process. Actively engaged participants are more likely to recall and use the information outside of the confines of the training. However, leading an active training is hard and requires solid facilitation skills. For this reason, the next four sections cover some key facilitation skills that you will need to effectively lead an active and productive training. This section reviews guidelines needed for:



- Leading vs. Directing

Leading vs. Directing

The key to facilitating effectively is to remember that your role is to lead the discussion, not direct it. As a leader, you should focus on drawing ideas out of the participants, rather than dominating with your ideas and experiences. The following are tips to help you remember to facilitate rather than direct:



- **Be respectful of the participants.** Demonstrate this respect by calling them by their names and listening actively.
- **Be enthusiastic about the topic and the training program.** Display your enthusiasm by leaning towards participants when they are speaking.
- **Ask and encourage questions and idea sharing.** Do not use destructive language, such as, "That's wrong," when responding.
- **Be clear and direct.** This means give examples and avoid the passive voice, such as, "Health inequities are revealed by the data," instead of "The data reveals health inequities."
- **Keep your own contributions during group discussions brief.** Let participants respond to questions and to one another first. If they answer a question completely, you, the trainer, need not add additional information.
- **Use silence to give participants time to think about an answer or response to a question before you give them "the answers."** Count to ten. If you don't get any responses from the participants, rephrase the question and count to ten again. Then, prompt the group with an answer and ask for others.



HINT: *Breaking into smaller groups for discussion is a good way to give quieter participants a chance to share their ideas and ask questions they might be too nervous to ask in front of the entire group.*

- **Encourage the participation of people who have been quiet.** One way to do this is to state the participant's name first and ask the participant an opinion question with no correct answer. You can avoid putting the participant on the spot by asking a question you know she or he can easily respond to.



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Facilitating Discussion

Discussions effectively promote active learning. However, interesting discussions that engage the group rarely develop by chance. This section offers tips in the following areas to help you stimulate interesting discussions:



- Asking Questions
- Responding to Incorrect Answers
- Answering Questions

Asking Questions

It is incumbent upon the trainers to pose stimulating and intriguing questions or topics for discussion. Below are some tips for asking questions that yield powerful responses.*



- **Use open-ended questions that encourage answers beyond yes or no.**
Closed question: Did you like the training?
Open-ended question: What did you like about the training?
- **Ask honest and relevant questions.** Begin by engaging participants around what they know.
- **Use “think back” questions.** When trying to engage participants in a discussion about their experiences, ask them to remember their past instead of imagining a hypothetical situation.
- **Ask clear and concise questions.** Make sure your questions only cover one issue at a time.
- **Use unbiased questions.** Phrase questions in a way that does not betray your opinion and that does not guide the participants to answer one way or another.



HINT: *If no one is responding to your questions, remember to try and ask it a different way. If that does not work, try prompting the group with an answer.*

- **Avoid asking “why.”** When asked why they think something or feel a certain way, people can become defensive for many reasons; they might not have an answer, they might not want to share their answer, or they might feel as though they do not need to justify what they believe. Instead of asking someone why they believe something, try asking them what experiences led them to that conclusion, to give examples, or other strategies that will help draw out more information.

* These question guidelines are taken from the CAPE “Focus Group Training Manual,” January, 2006

- *Use the following four types of questions at the appropriate times:*

Types of Questions	Purpose/Description	Example
Introductory	To begin talking about the training topic. It is usually a broad question that gets people thinking about the topic.	"How would you describe a responsive public health department?"
Transition	To move the discussion on to the key questions.	"Think back to Module I and the discussion of the history of the Alameda County Public Health Department. Does our history support a department with more community engagement?"
Key	To get detailed information on the central topic of the training.	"What needs to be done to make the Alameda County Public Health Department more focused on building community capacity?"
Ending	To bring discussion to a close and to summarize.	"This discussion covered community capacity building and the Department's role in encouraging it." "Is there anything else anyone would like to add before we move on?" "Next we will talk about what each of us can do to encourage community capacity building."

Responding to Incorrect Answers



Do not shut down a person who gave an incorrect response. This may freeze the discussion, as others will not want to risk responding for fear of being shut down. To minimize the potential for embarrassment, acknowledge the effort and then redirect the question to the whole group. For instance, you might say, "Interesting. I can see how you might come up with that idea. Who else has an idea?"

Answering Questions

As a trainer, one of the most common questions you will ask is, "Does anyone have any questions?" If, in response, you are asked questions you think the group can answer, redirect them to the group to encourage active learning. If you are the only person who can answer the question, use the following tips:



- **You're asked a question that you can't answer.** Don't be defensive or fake it, just say you don't know or ask to get back to the person later.
- **You're asked an extensive question.** Break the question down into smaller parts and keep your answer as concise as possible without omitting key details.

- ***You're asked a question you already answered.*** Try again and if the questioner still doesn't understand, but the rest of the group looks bored, ask to talk about it in more detail after the training.
- ***You're asked a question you think is stupid.*** Remember, not everyone is as familiar with the material as you are. Be patient.
- ***You're asked a controversial question.*** This is good, it means people are thinking critically. Take your time in answering, don't be pressured into saying anything you don't mean.
- ***You're asked a hostile question.*** Stay calm. Rise above it by sticking to the issues.



HINT: *Sometimes you may need a few seconds to collect your thoughts before answering a question. Several strategies for taking this time while staying engaged with the participants include repeating the question back to the participant, asking for clarification, or asking the participant to repeat the question because you are not sure if you heard it completely.*

- ***You're asked a question you don't want to answer.*** Say so, and, when appropriate, offer to meet with the person later to discuss your response. If everyone at the training wants you to respond, you should consider the reasons why and how it may be either useful or detrimental to the training.
- ***You're asked a dichotomous question.*** A dichotomous question is one for which you can answer with a simple "yes" or "no." Instead of giving a one word answer, try to add some detail to let the questioner know that you don't think the question is inconsequential.

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Facilitating Discussion

Active listening skills are essential for effective discussion facilitation. Active listening builds understanding and consensus in a group, as active listening skills include not only listening to content and feelings, but also responding in a way that enhances mutual understanding. This section covers the following active listening skills:*



- Encouraging
- Paraphrasing
- Mirroring
- Clarifying
- Reflecting
- Summarizing & Tracking
- Validating
- Stacking

Encouraging

Encouraging is how you create an open space for people to participate without putting any one individual on the spot. Encouraging is especially helpful during the early stages of the discussion, while participants are still warming up. As people become more engaged, they do not need as much encouragement to participate. However, at times, some participants will not feel engaged by the discussion. It is your responsibility as the facilitator to convey interest and help them discover what aspect of the discussion holds meaning for them. You can do this through encouragement. Once you have a participant speaking, you can also use encouragement to get them to keep talking. The following are some encouragement techniques:

	How to encourage	Examples
	Don't agree or disagree.	"Who else has an idea?"
	Use neutral words.	"Is there a perspective on this issue from someone in a different unit?"
	Use varying voice intonations.	"Does anyone have a "personal story" you are willing to share relating to this issue?"
		"Is this discussion raising questions for anyone?"
		"What was said at the end of the room?"
		"Can you tell me more?"

* The information from this section is taken from the following sources: *Active Listening Techniques* (The Community Board Program, Inc., 1987) & *Effective Facilitative Listening Skills: Techniques for Honoring All Points of View* (Community At Work, 1996)

Paraphrasing

Paraphrasing is a fundamental listening skill. Paraphrasing has a calming effect, as it relieves speakers of their anxiety that they are neither being listened to nor understood, and it reminds the speaker their her ideas are worth listening to. Additionally, it provides an opportunity for the speaker to hear how her ideas are being heard so she can ensure that they are being interpreted the way she intended. The following are techniques to keep in mind:

	How to paraphrase	Examples
	Use your own words to say what you think the speaker said.	Preface your paraphrase with a comment like:
	If the speaker's statement is one or two sentences, use roughly the same number when you paraphrase.	"It sounds to me you are saying..." "This is what I am hearing you say..." "Let me see if I understand..."
	If the speaker's statement is very long, summarize it.	When you have completed the paraphrase, prompt for the speaker's reaction with a statement like: "Did I get that right?" If the speaker does not feel she was understood correctly, ask for clarification.

Mirroring

When using mirroring, the facilitator repeats what the speaker said verbatim, capturing their exact words. As most people do not need such precision in order to feel that they are truly being heard, paraphrasing is generally preferred. However, there are instances in which mirroring is useful. For instance, a facilitator uses mirroring at the beginning of a training, as the group often benefits from its trust-building effects. Additionally, a facilitator uses mirroring when she feels she needs to establish her neutrality. Finally, mirroring speeds up the tempo of a slow moving discussion.



Mirroring is not the same as mimicking. When you are repeating back the speaker's words, maintain a warm and accepting voice and use your own gestures regardless of the speaker's tone of voice and gestures.

Clarifying

Clarifying is a way of giving people the support they need to refine their ideas. It can be used to better understand what was said, to get more information, and to help the speaker see other points of view. It sends the speaker the message, "I am with you; I understand you so far. Now tell me a little more." Additionally, it lets the speaker know that their ideas are worth exploring and that the group will give the time needed to allow her to get her ideas all the way out. Clarifying is particularly useful in two circumstances: 1) when someone is having difficulty

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expressing an idea; 2) when someone thinks she is being clear, but the thought is actually vague or confusing to listeners. In order to decide whether or not an idea needs to be clarified, ask yourself, “Do I think I understand the core of what s/he is trying to say.” If the answer is “no,” attempt to clarify. The following are techniques useful for clarifying ideas.

	How to clarify	Examples
	Paraphrase the speaker’s statement and then ask a clarifying question.	The speaker says, “I think it is fair to say that most people would be uncomfortable with the change.” The listener says, “So, you are saying most people would not like the change. Can you give me an example of what you mean?”
	Restate a wrong interpretation to force the speaker to explain further.	Other clarifying questions include: “Can you say more about that?” “What do you mean by...?”
	Use varying voice intonations.	Instead of asking a question, you can paraphrase the speaker, adding something like “Because...”, “And...” or “So...” at the end of the sentence. “You are saying to wait, because...”

Reflecting

Reflecting is the act of telling a participant your interpretation of the basic feelings she expressed while speaking. A facilitator is using reflecting when she says to a participants, “You seem upset,” or “You sound very excited about all the possibilities.” Reflecting allows you to show the participants that you understand how they feel. It also allows participants to evaluate their own feelings after hearing them expressed by someone else. Just as in mirroring, it is important to maintain a warm and accepting tone of voice rather than imitating the speaker.

Summarizing & Tracking

Summarizing is the work that facilitators do to review the progress of the discussion, pull together the important facts and ideas, and establish the basis for further discussion. Summarizing is not something to save until the end of the discussion. It should be used periodically throughout the discussion to ensure participants understand what is being discussed and the direction the discussion is moving. In order to summarize, facilitators restate the major ideas expressed, including feelings.

When several lines of thought exist simultaneous within the same discussion, facilitators use a summarizing technique known as tracking. The name tracking is very literal, as it means keeping track of the various lines of thought that are going on simultaneously. Tracking lets the group see that several elements of the topic are being discussed at once, and that all are treated as equally valid. Tracking relieves the anxiety felt by someone who wonders why the

group is not responding to her ideas, as well as helps participants maintain clarity regarding what exactly is being discussed. The following are the steps for tracking.

	How to track	Example
	Tracking is a three-step process, the first and second of which is also useful for summarizing.	“It sounds like there are three conversations going on right now. I want to make sure I am tracking them correctly. It sounds like one conversation is about roles and responsibilities.
	First, the facilitator indicates that she is going to step back from the conversation and summarize it.	Another is about finances. And a third is about what you’ve learned by working with the last person who held this job.
	Second, she names the different conversations that have been in play.	Am I getting it right?”
	Third, she checks with the group for accuracy.	

Validating

Validating is very simple and has a great impact. A facilitator is validating when she acknowledges the worthiness of another person by saying something like, “I really appreciate your participation.” This statement demonstrates that you value the participant’s ideas, opinions, and feelings; as a result the participant is likely to remain engaged in the training.

Stacking

Stacking is a procedure for helping people take turns when several people want to speak at once. During a discussion, participants may become distracted as they compete for air time. Stacking lets participants know that they will have a turn to speak and frees-up the facilitator to listen instead of constantly trying to remember who has spoken and who is waiting to speak. Even though stacking is not considered an active listening technique, we have included it here because it helps both the facilitator and the participants maintain active listening.

	How to stack	Example
	First, the facilitator asks those who want to speak to raise their hands.	(1) “Would all those who want to speak please raise your hands.”
	Second, she creates a speaking order by assigning a numbers.	(2) “Susan, you are first. Deb you’re second and Bill, you’re third.”
	Third, she calls on people when it is their turn.	(3) When Susan has finished, “Who was second? Was it you Deb? Go ahead.”
	Fourth, when the last person has spoken, the facilitator checks for additional speakers.	(4) After the last person has spoken, “Does anyone else have something to add?”

Facilitating Discussion

Regardless of your skill as a facilitator and the amount of preparation you put into the training, you will inevitably face some difficult situations. This section covers how to handle the following types of situations:*



- Discussion Dominators
- No Response
- Off-topic Discussions
- Side Conversations
- Skipping Ahead
- Interpersonal Conflicts
- Rambling Discussions
- Sensitive Topics

Discussion Dominators

If someone is doing a lot of the talking it may prevent others from contributing their thoughts, which limits their active learning. Although it may seem intimidating, it can be very easy to reduce the amount of sharing coming from one participant.



- ✓ Wait for a pause in her speaking, such as when she takes a breath, respectfully acknowledge her contribution, and thank her. You can say something like, “I really appreciate your comments.”
- ✓ Then make direct eye contact with other participants and ask something like, “I’m very interested in hearing how other people are feeling about this issue” or “It’s very interesting to get a variety of perspectives, and I would like to hear from other people as well.”

No Response

Every facilitator has stood before a group that stares at her blankly after she asked what she thought was a very simple question. Even questions that stimulated the most interesting discussions with one group can fall completely flat with another. In this kind of situation, it is helpful to try to understand why participants are not responding.



- **Did you ask a question that was difficult for the participants to understand?** If so, rephrase or reword the question in a way that ensures that salient issues are explored.
- **Do you think you might have asked a sensitive question** (i.e., something that people are afraid to answer honestly because it might make other people angry)? Please see the last part of this section for ideas on how to handle sensitive topics.

* Most of these guidelines are taken from the CAPE “Focus Group Training Manual,” January, 2006



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- ***Are people tired of talking about the topic and/or do they have no more to say about a topic?*** In this case, it may be important to simply state, “Is there anything else that you would like to share? [pause] If not, we can move on.” If you, as the facilitator, think you haven’t gotten all of the information you want on that topic, rather than trying to force the issue, just be aware that there may be an opportunity to elicit salient information through probing that occurs with respect to other questions.
- ***Are participants bored of discussions and need more stimulating activities to get them thinking?*** Even though the Public Health 101 training is filled with engaging activities, it might not be enough. For instance, there may be times when you are conducting a training after a particularly exhausting week for many of the participants and so they are dragging. Instead of trying to force the training as you planned it, transform the discussions into activities.



HINT: The following website has a lot of good suggestions on how to turn discussions into activities:

<http://www.businesstrainingworks.com/Onsite%20Training%20Web/Free%20Articles/PDFs/Active%20Training%20and%20Teaching.pdf>

- ***Are people feeling uncomfortable about talking?*** This typically occurs at the beginning of a training and is less likely to occur when the facilitator is able to set a comfortable tone and put people at ease in the beginning. If you sense that the group is not warmed-up enough, you can try another ice breaker or jump straight to an activity. If, however, this continues to be an issue during the training, talk about easier topics, things that you think participants may be more familiar with or comfortable talking about, or, perhaps, things that you know are particularly interesting to them. If no one responds to a question, and you aren’t sure exactly what the problem is, it’s okay sometimes to just wait it out. Be quiet for a moment and allow people time to think. Often, someone will speak up, either to answer the question or to ask a question that allows you to better understand the silence.

Off-topic Discussions

When the group begins to talk about issues not relevant to the training, you might take advantage of a pause and say, “Thank you for that interesting idea. Perhaps we can discuss it in a separate session. For the purposes of exploring further the specific topics that are the focus of this discussion, with your consent, I would like to move on.”

Side Conversations

One of the best ways to handle a situation in which some people are having a private discussion is to address it before the training begins, when you set ground rules. Stress that it is *very* important not to have side conversations because it interferes with individual’s full participation in the group discussion.

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Difficult Situations



Do not stop the discussion abruptly. Unless a side conversation is so distracting it absolutely cannot be ignored, do not interrupt a speaker in order to ask others to quiet down; this may make the speaker lose her train of thought and can disrupt the flow of the discussion. Instead, wait until the speaker has finished and respond to the person first. Then, you might respectfully remind people of the ground rules and ask that people finish their conversations and rejoin the larger group discussion.



HINT: *This kind of disruption may also signal that it is time to take a break, and you may want to suggest no more than a five minute break. It will be important to make sure people know at what time the training will continue and be proactive about bringing people back together so that the training can continue.*

Skiping Ahead

When a participant skips ahead, providing information relevant to topics you have not yet covered, you can use probes to gently return the person to the topic at hand. You do not want to interrupt the participant; rather, let her finish her thought and remain an active listener. Acknowledge what she said and that it was an interesting point and that you would love to hear more from her once the group gets to the topic. Once you get to that topic, acknowledge that relevant information has already been shared, paraphrasing what the participant said. Ask the participant if there is anything else she would like to add on the topic and then ask the group for feedback on her point. Make sure that all group members have an opportunity to explore the issue more fully, if need be.

Interpersonal Conflict

If two or more people in the group begin arguing with each other in an unproductive manner, you must confront the situation before it spirals out of control. You can try to defuse the situation with humor, or give the participants an easy way out of the argument by reframing what they are saying and moving on. If this does not work, direct the whole group to the ground rules. If one group member continues to target attacks at one person, ask that person specifically to respect the ground rules. If the conflict continues, address the problem directly, asking for any underlying reasons that might be fueling the conflict. Finally, if that does not work, speak to the person or persons involved separate from the group.



HINT: *Again, this kind of disruption may also signal that it is time to take a break. During the break, go and talk to the participants involved in the conflict and see if there is something you can do to calm them down and resolve the conflict before the break ends.*

Rambling Discussion

In order to get through the whole training, some discussions need to be curtailed, even when they are productive and interesting. When a discussion has gone on for too long, you can jump in when someone takes a breath and comment on the quality of the discussion, but add

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that it is time to move on. Summarize the key points and offer to resume the discussion later if there is time. (Congratulate yourself on successfully engaging the participants!)

Sensitive Topics

Introducing sensitive topics is one of the trickiest aspects of facilitation. The following tips can help you prepare the participants and maximize their sense of safety discussing the issue.



- **Pilot test questions.** If you know a particular question may bring up sensitive issues, check with others to see how they perceive it and if there is a better way to ask it.
- **Address the issue from the beginning.** Do not surprise participants with a sensitive topic and acknowledge that it may be harder to talk about the topic than ignore it. Letting people know that the training will delve into sensitive areas can help participants prepare. A good time to do this is while the group is setting ground rules - it is helpful to encourage participants to devise rules that will help them feel comfortable talking about sensitive issues.
- **Pick an ice breaker that really encourages trust.** Low physical activity ice breakers, like sharing the origin of one's name, can help keep the energy at a calm and thoughtful level once the sensitive topic is broached. Additionally, it is helpful to pair positive and light ice breakers, such as, "What is one fun thing you did over the weekend?," with heavy discussions. Doing this ensures that the whole session is not emotionally difficult for the participants.
- **Gradually build up to sensitive discussions.** Do not attempt to engage the participants in a sensitive discussion with the first question. Groups need time to get to know each other and form trust.



HINT: *Assess your own biases for how they may make some participants uncomfortable with your facilitation of the topic. Are you assuming things? What is your tone like? Are you being culturally sensitive? How would you feel in the place of the participants?*

- **Be prepared to change plans.** If participants are very upset or are simply not responding, you may have to change your plans. When participants are not responding try rephrasing the question or asking a slightly different question. You can also try moving to a different question or a less sensitive topic, and returning to the difficult issue later. Either approach may make it possible to pose a less controversial question to the group. You can use these techniques, as well as trying another ice breaker, when participants are upset.
- **Use breaks to check in with people.** It is helpful to break after addressing a sensitive topic, especially if some participants seemed upset during the discussion. It is very important to check in with all participants, but especially those who seem upset. Make sure to check in with these participants face to face, rather than ignoring them and their feelings.
- **Be willing to share your own opinions and experiences when appropriate.** If you struggle with something the group is struggling with, your comments might make them feel more comfortable sharing their thoughts. However, remember that the discussion should focus on participants' ideas, not yours.

Ending

It is important to provide closure in order to ensure participants leave feeling positive. This section covers two aspects of ending:



- Debriefing
- Closing

Debriefing

Debriefing after the training is essential to getting feedback from participants on the training. It is not only beneficial for the instructor, who can use the feedback to improve subsequent trainings, it is a good chance for participants to express their thoughts so that they feel their voice is truly heard. Some guidelines for a successful debriefing include:



- **Make the objective clear.** Make sure that they understand that debriefing is used for you to gain an understating of participants' reactions, suggestions and ideas for what went well and what did not, and how the training can be improved. They can comment on the clarity or flow of content at this point, but comments rehashing a participant's ideas regarding the topic should be redirected.
- **Keep the discussion focused.** Ask for constructive feedback related to the current training only.
- **Encourage feedback.** Tell participants how much you value their observations and ideas, thanking each person for any debriefing comments they contribute.



Debriefing should not be optional for participants. Make sure that you debrief within the time scheduled for the training so that participants do not leave before they have given you their feedback.

Closing

After debriefing, thank the group for their participation and say good bye. Instead of immediately collecting your materials and breaking-down the room, or turning to debrief with your co-trainer, position yourself in a place where participants can access you. There may be participants who have questions or comments they did not want to share with the group, who want to thank you, or want to have personal contact with you for some reason. Validate their needs by being available, as this will send them off feeling personally connected to the training.

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Appendix A

Ice Breakers

Silent Interviews

1. Divide the group into pairs - try to mix the group into pairs of folks who don't know each other well.
2. Ask the participants to introduce themselves to their partner.
3. Instruct the group that from this point forward, speaking is not allowed. This includes whispering, mouthing words, and making sounds, too!
4. Inform the group that they must tell their partner 3 things about themselves without speaking, similar to a charades game. These things cannot be physical characteristics.
5. Once all of the partners have finished miming to each other, call everyone back into a circle.
6. Ask for each pair to verbally introduce their partner to the group, as well as the three things that they learned (or think they learned).

Chatter Bugs

Required items: "Chatter Bugs" handouts with discussion topics predetermined by trainer. Each participant should receive one. The topics should be relevant to the training.

Possible Discussion Topics for Public Health 101

- | | |
|-------------------------------------|--|
| ➤ What unit do you work in? | ➤ Do you work directly with community members? |
| ➤ How long have you worked here? | ➤ Do you think the health of the community has changed recently? |
| ➤ Where are you from? | |
| ➤ How do you describe your culture? | |

1. Ask participants to pair up with a buddy and introduce themselves.
2. Have participants select one of two categories – Ladybugs or Lightening Bugs.
3. Have all Ladybugs form a circle with their backs toward the center of the circle.
4. Have all Lightening Bugs face their partners in a larger circle outside the Ladybugs.
5. Once everyone is in place, issue "Chatter Bugs" handouts with suggestions to chat about.
6. Have all participants rotate 1 person to their right to face a new partner.
7. Call out a "Chatter Bugs" topic from the handout and instruct participants to begin chatting about it with their new partner. Each person gets 30 seconds to respond.
8. After 1 minute, signal that the time is up. Instruct participants to rotate 1 person to their right to face another new partner. Call out a different topic and have participants repeat the process until they have completely gone around the circle and met everyone.
9. Allow a few minutes of free time at the end of the activity for participants to mingle and discuss the things they didn't get to cover with people they'd like to get to know better.

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Glossary of Toxics Terminology

A fact sheet from Toxic Free NC

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Acute toxicity – Refers to effects that occur immediately after exposure to a toxic substance (hours/days). Usually the term *acute* refers to a short-term and high-dose exposure (see *subchronic* and *chronic* for comparison).

Antimicrobial – Any chemical used to kill or prevent microbes (including bacteria, fungi, protozoa, and viruses).

Carcinogen (Carcinogenicity, carcinogenic) – Any substance that promotes abnormal cell growth that can lead to cancer.

CAS number – (Chemical Abstracts Service number) A specific number assigned to identify a chemical by the American Chemical Society. The numbers have no chemical meaning.

Chronic toxicity – Refers to health effects that occur or persist after a long-term repeated exposure to a toxic substance (months or years). Usually this refers to a low-dose exposure (see *acute* and *subchronic* toxicity for comparison).

Cholinesterase inhibition – A substance that injures living organisms by inhibiting the activity of nerve function (for example, organophosphate and carbamate pesticides are cholinesterase inhibitors).

Combustible - Refers to a material that will ignite (catch fire) easily.

Corrosive - A substance that causes visible damage to living tissue through a chemical process.

Developmental – Usually refers to changes occurring during certain growth process (for example, brain development in a child). Some developmental stages can be very sensitive to environmental exposures.

Emphysema – A chronic disease of the lungs that makes breathing difficult.

Endocrine Disruptor – Substances that cause the endocrine system (the hormone system) not to function properly. Endocrine disruptors can cause developmental defects, reproductive problems, and certain cancers (see *endocrine system*).

Endocrine System – Includes glands and hormones that signal the body in growth, reproduction, and development.

EPA – (Environmental Protection Agency) The US government organization charged with protecting the environment and human health through certain regulations. The EPA's Office of Pesticide Programs is in charge of federal pesticide regulation.

EPA registration number – Identification number for all registered pesticides; consists of two numbers, the company number and a product number, separated by a dash (-). Sometimes, there is a third set of numbers, which indicates a different distributor.

Fetus (fetal) – An unborn human or animal.

Flammable – A substance that burns quickly and easily.

Flash point – The temperature at which a substance gives off a vapor that can form a flammable mixture with air.

Fungicide – Chemicals used to kill or prevent fungi.

Genotoxic (genotoxic, genotoxicity) – A substance that causes or induces damage to DNA.

Herbicide – Chemical used to kill/prevent plants or weeds.

Fighting pesticide pollution since 1986.
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IARC – (International Agency for Research on Cancer) An inter-governmental scientific group that classifies chemicals based on their cancer-causing potential.

Insecticide – Chemical used to kill/prevent insects.

Interaction – Refers to the way in which a combination of chemicals may increase or decrease the dangers of the chemicals involved.

LD₅₀ – In a toxicology study, this is the level at which a single dose causes death in half of the test animals participating in the study (*acute toxicity* is normally defined by LD₅₀ values).

LOEL, LOAEL (Lowest Observed Effect Level, Lowest Observed Adverse Effect Level) – Lowest dose in a toxicology study at which a toxic or adverse effect was seen.

Mg/m³ – (milligrams per meter cubed) A measure of concentration (weight by volume).

Miscible – A liquid or gas that will easily dissolve in another substance.

Mutagen (mutagenicity, mutagenic) – A substance that causes damage to DNA, and that can possibly lead to cancer.

NCDA – (North Carolina Department of Agriculture) A state agency that is responsible for agriculture and related issues. The NCDA Pesticide Section regulates pesticides in North Carolina.

Neurotoxin (neurotoxic) – A substance that affects nerve cells and can produce a variety of symptoms, including headaches, vomiting, shaking or twitching, sweating, emotional and/or behavioral changes, and even death.

NIOSH – (National Institute for Occupational Safety and Health) A federal agency that tests equipment, conducts studies of workplace hazards, and proposes safety standards for the workplace.

NOEL, NOAEL (No Observed Effect Level, No Observed Adverse Effect Level) – Highest dose in a toxicology study at which no toxic effects were observed (see *LOEL*).

Paresthesia – A condition causing ongoing burning or feeling of “pins and needles”. This condition is often caused by heavy metal poisoning (lead, arsenic, etc.).

Pesticide – A substance used to kill, prevent, or control living organisms.

ppm – (parts per million) Measure of the concentration of a substance by volume.

Poison – A toxic substance that can cause death or illness.

Reactive – The description of how a substance releases energy under certain conditions (usually in the form of heat).

Reproduction (reproductive) – Having to do with creating offspring or children, including organs (e.g. penis) and function (e.g. the ability to become pregnant).

Respiratory – The body system involved in breathing (including mouth, nose, lungs, diaphragm).

Subchronic toxicity – Refers to toxic effects that occur after repeated exposures (for weeks or months). Usually this term refers to a moderate exposure over a moderate length of time (see *acute* and *chronic* toxicity for comparison).

Teratogen (teratogenic, teratogenicity) – Substance that causes defects in the developing embryo or fetus.

Toxic – A substance that causes adverse and possibly harmful biological effects (see *LD₅₀*).

Xenobiotic – A chemical or chemical mixture that is foreign to the body.

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Glosario de Terminología en Tóxicos

Antimicrobica – Cualquier químico usado para matar o prevenir microbios (incluyendo bacteria, hongos, y virus).

Carcinógeno – (Carcinogenicidad, Carcinogénico) – Cualquier sustancia que promueve el crecimiento de células anormales que pueden causar cáncer.

Combustible – Se refiere a un material que se enciende (prende en fuego) fácilmente.

Corrosivo – Una sustancia que causa daño visible a tejidos vivos por medio de un proceso químico.

Desarrollo – Usualmente se refiere a los cambios que ocurren durante cierto proceso de crecimiento (por ejemplo, desarrollo del cerebro en un niño). Algunas etapas de desarrollo pueden ser muy sensitivas a exposiciones ambientales.

Disruptor Endocrino – Sustancia que causa que el sistema endocrino (la hormona del sistema) no funcione apropiadamente. Los disruptores endocrinos pueden causar defectos de desarrollo, problemas reproductivos, y ciertos tipos de cáncer (ver *sistema endocrino*).

Enfisema – Una enfermedad crónica de los pulmones que dificulta la respiración.

EPA – (Agencia de Protección Ambiental) La organización gubernamental de EEUU encargada de proteger el medioambiente y la salud humana mediante ciertas regulaciones. La Oficina de Programas de Pesticidas de EPA está encargada de la regulación federal de pesticidas.

Feto (fetal) – Un humano o animal que no ha nacido.

Flamable – Una sustancia que se quema rápidamente y fácilmente.

Fungicida – Químicos usados para matar o prevenir los hongos.

Genotóxico – (Genotóxico, Genotoxicidad) – Una sustancia que causa o provoca daño al ADN.

Herbicida – Químico usado para matar o prevenir las malas hierbas.

IARC – (Agencia Internacional para las Investigaciones en Cáncer) Un grupo científico inter-gubernamental que clasifica los químicos basándose en su potencial para causar cáncer.

Inhibición “Cholinesterase” – Una sustancia que lesiona organismos vivos a través de la inhibición de la actividad del funcionamiento de los nervios (por ejemplo, organofosfato y pesticidas “carbamate” son inhibidores “cholinesterase”).

Insecticida – Químico usado para matar o prevenir insectos.

Interacción – Se refiere a la manera en que una combinación de químicos podría incrementar o disminuir el daño de los químicos involucrados.

LD₅₀ – En un estudio de toxicología, este es el nivel en el cual una simple dosis causa la muerte en la mitad de los animales utilizados en el estudio (*toxicidad aguda* es normalmente definida por valores LD₅₀).

LOEL, LOAEL – (Menor Nivel de Efecto Observado, Menor Nivel de Efecto Adverso Observado) – El menor nivel en el cual un tóxico o efecto adverso fue visto en un estudio de toxicología.

Mg/m³ – (miligramos por metro cúbico) Una medida de concentración (peso por volumen).

Miscible – Un líquido o gas que se disolverá fácilmente en otra sustancia.

Mutágeno – (Mutagenicidad, Mutagénico) – Una sustancia que causa daño al ADN, y que podría ocasionar cáncer.

NCDA – (Departamento de Agricultura de Carolina del Norte) Una agencia del estado que es responsable por la agricultura y asuntos relacionados con la misma. La Sección de Pesticidas de la NCDA regula los pesticidas en Carolina del Norte.

Continúa en la parte de atrás



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Neurotoxin – (Neurotóxico) Una sustancia que afecta las células nerviosas y que puede producir una variedad de síntomas, incluyendo dolores de cabeza, vómito, temblor o jalones, sudor, cambios emocionales y/o de comportamiento, y hasta la muerte.

NIOSH – (Instituto Nacional para la Seguridad y Salud Ocupacional) Una agencia federal que examina equipos, conduce estudios de riesgo en el lugar de trabajo, y propone estándares de seguridad para el lugar de trabajo.

NOEL, NOAEL – (Nivel de Efecto No Observado, Nivel de Efecto Adverso No Observado) – La máxima dosis en un estudio toxicológico en el cual no fueron observados efectos tóxicos.

Número CAS – (Número de Servicio de Abstractos Químicos) Un número específico asignado para identificar un químico por la Sociedad Americana de Químicos. Los números no tienen un significado químico.

Número de registro de EPA – Número de identificación para todos los pesticidas registrados: consiste en dos números, el número de la compañía y el número del producto, separados por un guión (-). A veces, hay un tercer set de números, que indica un distribuidor diferente.

Parestesia – Una condición que causa constante quemazón o sensación de “pullas y agujas”. Esta condición es frecuentemente causada por envenenamiento con metales fuertes (plomo, arsénico, etc.).

Pesticida – Una sustancia usada para matar, prevenir, o controlar organismos vivientes.

ppm – (partes por millón) Medidas de concentración de una sustancia por volumen.

Punto flash – La temperatura a la cual una sustancia emite vapor que puede formar una mezcla inflamable con aire.

Reactivo – La descripción de como una sustancia suelta energía bajo ciertas condiciones (usualmente en la forma de calor).

Reproducción – (Reproductivo) Tiene que ver con la creación de descendencia o hijos, incluyendo órganos (pene) y funcionamiento (la habilidad de quedar embarazada).

Respiratorio – El sistema del cuerpo que envuelve la respiración (incluyendo boca, nariz, pulmones, diafragma).

Sistema Endocrino – Incluye las glándulas y hormonas que señalizan el cuerpo en crecimiento, reproducción y desarrollo.

Teratógeno – (Teratogénico, Teratogenicidad) Sustancia que causa defectos en el desarrollo del embrión o feto.

Toxicidad Aguda – Se refiere a los efectos que ocurren inmediatamente después de la exposición a una sustancia tóxica (horas/días). Usualmente el término *agudo* se refiere a exposición a corto plazo y grandes dosis (ver *toxicidad subcrónica y crónica* para comparación).

Toxicidad Crónica – Se refiere a los efectos de salud a largo plazo, que ocurren o persisten después de una exposición repetida a una sustancia tóxica (meses o años). Usualmente esto se refiere a una baja dosis de exposición (ver *toxicidad aguda y subcrónica* para comparación).

Toxicidad Subcrónica – Se refiere a efectos tóxicos que ocurren después de exposiciones repetidas (por semanas o meses). Usualmente este término se refiere a una exposición moderada en un período de tiempo moderado (ver *toxicidad aguda y crónica* para comparación).

Tóxico – Una sustancia que causa efectos biológicos adversos y posiblemente dañinos (ver *LD₅₀*).

Veneno – Una sustancia tóxica que puede causar muerte o enfermedad.

Xenobiótico – Un químico o mezcla química que es desconocida para el cuerpo.

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Toxic-Free Pest Control from your Pantry

A fact sheet from Toxic Free NC

Toxic Free NC common sense pest control recipe

Roach Balls

- 1 cup borax
- 1/4 cup sugar
- 1/4 cup minced onion
- 1 Tbsp. Cornstarch
- 1 Tbsp. Water

Make a paste of the ingredients and roll into little balls.

To use: Place 2 or 3 balls in a sandwich bag anywhere you have a roach problem. The roaches will eat the balls and carry them home to their nests, where they will die.

Boric acid or borax is safe to handle, though inhaling it in large amounts can irritate the respiratory tract. Because it is not a nerve poison, roaches will not become resistant.



Toxic Free NC common sense pest control recipe

Ant Bait

- 3 cups water
- 1 cup sugar
- 4 tsp. Borax

To use: Mix together and place the mixture in 3 to 6 screw top jars. Loosely pack with cotton wool. Screw the lids on tightly and seal with tape. Poke holes in the lid and place near points of entry, or along ant trails, for best results.

Boric acid or borax is safe to handle, though inhaling large amounts can irritate the respiratory tract. Clearly label the jar as POISON and keep away from pets and curious children.



Toxic Free NC common sense pest control recipe

Mold & Mildew Killer

- 1/2 cup white vinegar
- 1/2 cup borax
- 2 cups warm water

Pour or spray onto moldy areas and let sit for a few minutes, then scrub off with a brush. If mildew is still visible, repeat application. Do not save the leftover mixture.



Toxic Free NC common sense pest control recipe

Herbal Insect Repellent

- 15 drops lavender oil
- 15 drops tea tree oil
- 10 drops citronella oil
- 10 drops eucalyptus oil
- 10 drops cedarwood oil

In a small bottle, mix these with about one ounce of your favorite unscented skin oil (olive oil works fine).

Not recommended for pregnant women. Keep out of your eyes. Try a small amount on your wrist first to check for skin allergies. Experiment with different ingredients to develop your own blend!



Find out more about toxic-free alternatives to pesticides at www.ToxicFreeNC.org

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Control No Tóxico para las Plagas desde su Despensa

Una hoja informativa de NC Libre de Tóxicos

Receta práctica para controlar las plagas

Bolas para Cucarachas

- 1 taza de bórax
- 1/4 taza de azúcar
- 1/4 taza de cebolla picadita
- 1 cucharada de almidón de maíz
- 1 cucharada de agua



Haga una pasta con los ingredientes y forme pequeñas bolas con la pasta. Modo de uso: coloque 2 o 3 bolas en una bolsa para sandwich y déjela abierta. Coloque la bolsa donde sea que tenga un problema de cucaracha. Las cucarachas se comerán las bolas y las llevarán consigo a sus nidos, donde morirán.

Acido bórico (bórax) se puede manipular sin riesgo, aunque el inhalar grandes cantidades del mismo puede irritar el conducto respiratorio. Porque no es un veneno para los nervios, las cucarachas no se pondrán resistentes.

Receta práctica para controlar las plagas

Carnada para Hormigas

- 3 tazas de agua
- 1 taza de azúcar
- 4 cucharaditas de bórax



Modo de uso: Mezcle todo junto y coloque la mezcla en 3-6 frascos de tapa enroscada. Empaque don algodón de lana ligeramente. Enrosque la tapa fuertemente y selle con teipe. Haga huecos en la tapa y coloque cerca de los puntos de entrada, o junto a los caminos de las hormigas para mejores resultados.

Acido bórico (bórax) se puede manipular sin riesgo, aunque el inhalar grandes cantidades del mismo puede irritar el conducto respiratorio. Etiquete claramente el frasco como **VENENO** y manténgalo alejado de mascotas y niños curiosos.

Receta práctica para controlar las plagas

Matador de Moho

- 1/2 taza de vinagre blanco
- 1/2 taza de bórax
- 2 tazas de agua tibia



Modo de empleo: viértalo o espárzalo en el área mohaza y deje reposar por algunos minutos, luego remuévalo con un cepillo. Si el moho está todavía visible, repita la aplicación. No guarde la mezcla que sobra.

Receta práctica para controlar las plagas

Repelente de Hierbas para Insectos

- 15 gotas de aceite de lavanda
- 15 gotas de aceite de "árbol de té"
- 10 gotas de aceite de citronela
- 10 gotas de aceite de eucalipto
- 10 gotas de aceite de madera de cedro



Modo de empleo: En una botella plástica de presión, mezcle estos ingredientes con su aceite sin aroma para la piel preferido (el aceite de oliva funciona bien.)

No se recomienda a mujeres embarazadas. Mantenga fuera del contacto con los ojos. Pruebe una cantidad pequeña en su muñeca primero, para chequear si hay sensibilidad en su piel. Experimente con otros ingredientes y crear su mezcla personal!

Aprenda más sobre alternativas no tóxicas a los pesticidas: www.ToxicFreeNC.org

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Proteja a su Familia de Pesticidas Tóxicos

Hoja Informativa del Centro de Recursos Agrícolas y Proyecto de Educación sobre Pesticidas

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Las familias latinas pueden correr más riesgo de tener problemas de salud causados por productos químicos tóxicos que se encuentran en el medioambiente, incluyendo pesticidas. En Estados Unidos, los niveles de pesticidas tóxicos encontrados en mujeres, niños y personas latinas son mas altos que en otra gente.¹

Los pesticidas son productos venenosos usados para matar insectos y malas hierbas. También son peligrosos para las personas, especialmente niños pequeños y mujeres embarazadas. Recientemente, médicos en Canadá recomendaron que, debido al riesgo que presentan para la salud, se debe evitar la exposición a todo tipo de pesticidas.²

Los residuos de pesticidas son muy comunes en hogares.³ Entran cuando ...

- ...los pesticidas se usan para controlar insectos, malas hierbas u otras plagas, tanto fuera como dentro del hogar.
- ...los pesticidas son utilizados en campos de cultivo o en lugares cerca de su casa, y se extienden por medio del aire o contaminan el agua.
- ...una persona que ha utilizado pesticidas, o ha pasado tiempo donde son utilizados, trae los residuos de dichos pesticidas dentro de la casa en los zapatos, la ropa o el cuerpo.
- ...envases o equipo utilizados en la aplicación de pesticidas son guardados o utilizados en casa.
- ...frutas y vegetales están contaminados con residuos químicos utilizados donde son cultivados.

Una vez que contaminan la casa, los pesticidas duran bastante tiempo. Residuos invisibles de pesticidas pueden permanecer en el aire y en el polvo dentro del hogar por semanas, meses o aún mas tiempo; quedando así protegidos del viento, de la lluvia y del sol.

Dentro de la casa, los niños pueden fácilmente tocar, respirar y tragar residuos de pesticidas. Las pesticidas se encuentran en la capa de aire mas cercana al suelo, donde los niños pequeños respiran.⁴ También se depositan en el suelo, donde los niños juegan. Los pesticidas pueden adherirse a los juguetes, especialmente a las fibras de juguetes rellenos, las almohadas y otras cosas de consistencia suave.⁵



Los niños son más sensibles que los adultos a productos químicos tóxicos en el ambiente. Al ser mas pequeño, el cuerpo de un niño absorbe mas productos químicos por libra. Al estar aun desarrollándose, los cuerpos de los niños no pueden asimilar dichos productos químicos como el cuerpo de un adulto. Cuando los bebés crecen rápidamente, por ejemplo durante el embarazo, la infancia o periodos activos de crecimiento, el riesgo a su salud debido a la exposición a productos tóxicos es aun más grande.

Algunos pesticidas pueden aumentar el riesgo de que un niño desarrolle enfermedades crónicas como asma,⁶ problemas mentales y emocionales, esterilidad y otros problemas del aparato reproductivo, defectos de nacimiento y algunas formas de cáncer.⁷

¹ Schaefer, Krisin et al. 2004. *Chemical trespass: chemicals in our bodies and corporate accountability*. Pesticide Action Network North America, San Francisco CA. <http://www.panna.org/>. Viewed on 8/11/2004.

² Sanborn, Margaret et al. 2004. "Systematic review of pesticide human health effects". Ontario College of Family Physicians. Toronto, Ontario.

³ Quandt, Sara et al. March 2004. *Agricultural and residential pesticides in wipe samples from farmworker family residences in North Carolina and Virginia*. Environmental Health Perspectives. Volume 112, Number 3.

⁴ P.S. Guzelian et al., ed. 1992. *Similarities and Differences Between Children and Adults: Implications for Risk Assessment*. ILSI Risk Science Institute, Washington, DC.

⁵ Gurunathan S, et al. Jan 1998. *Accumulation of chlorpyrifos on residential surfaces and toys accessible to children*. Environmental Health Perspectives. Volume 106, Number 1.

⁶ Salam, MT et al. 2003. *Early life environmental risk factors for asthma: findings from the children's health study*. Environmental Health Perspectives. Volume 112, Number 6.

⁷ Sanborn, M et al.



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APPENDIX

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APPENDIX