



USING THE CURRICULUM

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Instructor's Manual



**Instructor's
Manual**



Manuals

Instructor manual

This manual has information which is not contained in the student manual. The introductory chapter *Using the Curriculum* contains valuable information about the manuals, your job as an instructor, and steps to follow when planning a training, as well as several sample documents on which you can base your own course schedule, student evaluation, and hands-on skills assessments. Chapters 1-9 correspond to those chapters in the student manual.

At the beginning of each chapter in the Instructor's Manual, you will find:

- a. objectives of the chapter
- b. topics covered
- c. different training methods and suggested time needed for each.

At the end of each chapter, you will find references. These same references are listed at the end of the chapter in the student manual. Please look through these reference lists. You should try to have a copy of the reference documents marked with a star (*) in the student manual for the students to see.

The course is designed to be two days long with eight hours of instruction per day. This is a total of 16 hours of instruction that includes eight hours of hands-on instruction. The course outline can be found on page 27 of this section. This course is designed to meet the requirements of 40 CFR Part 745—Lead; Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities, a federal regulation under section 402 of the Toxic Substance Control Act (TSCA). *It is not designed to meet the training requirements established under OSHA's Interim Final: Lead in Construction standard (29 CFR 1926.62). Therefore, if the trainees desire both state/EPA and OSHA training for lead, additional training time would have to be added, preferably before conducting the training included in this curriculum.*

Student manual

The student manual is designed to provide the information a worker needs to perform safe lead abatement. The student manual is for the participant to keep. The participants will use the student manual throughout the course. Once the course is completed the student manual can be used by the participant as a reference manual.

Instructor's Manual



Your job as a lead abatement instructor

Your job is an important one. You are training workers to do lead abatement work in residences in such a way that they do not risk their health or the health of the occupants. When the worker uses safe work practices, lead poisoning can be prevented. Unsafe work practices can cause lead poisoning. A knowledgeable worker can help prevent young children from getting poisoned by lead.

This training course is designed to make your job as easy as possible. Whenever possible, we give you options, so you can choose the training methods and exercises that work best for you and the workers that you will be training.

This course is designed primarily for lead-based paint abatement in residential structures. It does not include information on the abatement of lead-based paint on other buildings and steel structures. It is anticipated that the EPA will be developing a curriculum focused solely on steel structure abatement in the future. Be aware that the hazards may be even greater for abatement workers in those settings.

We do not assume that you are a “lead expert,” but that you have had some experience concerning lead-based paint issues and conducting trainings. If there are topics that are too technical for you to handle at first, you can always bring in an outside “expert” to help you. For some of the sections, your state may require instruction by a medical and/or occupational health professional or a construction expert. You should contact your state program to obtain a copy of your state’s requirements.

Remember that each training is unique and different. You always want to try to improve your training. Make it fit each group of workers you are training. Make sure you update your training materials as requirements, regulations, or interpretations change and evolve.

Instructor’s Manual



How to start

Your first task is to become very familiar with all of the information that is part of the manual. Make a note of any questions you have as you read over the manual.

You can use the references at the end of each chapter to get more information on different topics. You can obtain many of these references for free by calling the National Lead Information Center at 1-800-424-LEAD. You can also contact government agencies and private organizations for more information. There is a list of these groups in the back of the student manual in the Resources Section.

Training adults

It is vital for you to remember that many of the people you are training have not been in a classroom for many years. They have learned a lot from their jobs by experience and by doing the job—not from books. To be successful in training adults, it is important to:

- a. Respect their lifetime of work and experience by tapping into their expertise.
- b. Make the training active, not passive, by involving participants in their own learning. Adults need to be active in their learning process. We learn more and remember more when we are hearing, seeing, and doing something. We may learn less and remember less if we are only hearing somebody speak at us.
- c. Make the training practical. You can do this in a number of ways.
 1. Use as many hands-on activities as possible. Adults learn on the job by being shown how to do the task and then by doing it themselves with supervision. Hands-on activities often can be done in a classroom setting if the space is available and the proper precautions are taken. This course depends on the use of hands-on activities for many of its sections.
 2. Include field sites to show the real work setting. Even though you won't be able to get on site after the lead abatement work has started, it is still very helpful to show a site before any work begins and even during preparation (e.g., laying of plastic, building of containment, etc.). Make sure you visit the site before bringing the class. Make sure the site is safe for a walkthrough.

Old buildings that are not being abated can also be used to point out which surfaces need abatement and how this abatement may be accomplished.
- d. Have clear objectives for the course as a whole and for each topic. Make sure you communicate these objectives to participants so that they know what information they are expected to learn. There are objectives laid out in the beginning of each chapter to aid you.

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Learner-centered training

For this course, the emphasis is on training methods that are not focused on you as the instructor, but on the learners. This is called learner-centered training. This course design does not allow you to stand in front of the class for hours and lecture (although a short lecture used at times can be very effective). The training methods suggested throughout the course encourage the active participation of the learners. This transfers learning not only from you to the class, but also from the class to you and each other.

So what does this mean for you? It may mean trying something new. You may be used to lecturing. This may be what you know how to do best. Lecturing is not necessarily the best way to learn. You can guide the participants in the learning process. Try these new approaches out. Add to your own tool box of training methods. It will help you in your own development as a trainer. You will learn more from the participants and may even have more fun.



Steps in planning a training

The following steps will help you make sure you have planned for your training and that you have all the materials you need:

1. Who will you train?
2. Where will you train?
3. Who will train with you?
4. What training methods will you use?
5. What training materials and equipment will you need?
6. How will you evaluate your training?

**Instructor's
Manual**



1. Who will you train?

What is their work experience? What are their reading and writing skills? Are they able to read English?

When you plan a training, the more you know about the students ahead of time, the better. It will help you tailor the course to their needs. For example, the course will look different if you are training workers who previously did asbestos abatement than if they are young people being trained for their first job. For the first group, you will want to highlight the differences between lead and asbestos abatement work. You can then review the similarities. For the second group, you should spend more time on health and safety issues and worker protection.

For these reasons, you may want to obtain background information on the participants ahead of time. One way to do this is to require attendees to complete a registration form that includes questions about their work experience. The responses may assist you in identifying the reading level of the participant. It would be helpful to have a question on the registration sheet to determine the highest grade level that the participant has completed.

You may not always be able to preregister the participant. You will need to assess their reading skills and work experience on the first day. You can observe how the participants complete the registration form on the first day of the course. A participant who cannot read English will have difficulty completing the registration form. You may note they will seek help from a fellow participant. It is best to speak privately with a participant who has difficulty in reading English. When a participant is not able to read, you should recommend that they sit close to the front of the room. Someone who cannot read often needs more visual aides. They need to be able to hear everything that is said. It is good to recommend that they have a friend, family member, or fellow classmate read the key facts and pull quotes to them every day after class.

You can be a skilled worker even if you cannot read. Not being able to read is a handicap. There are many skilled workers who are unable to read. The exam can be read to them. (Be sure to check with your state regulators to find out if they allow verbal exams.) You can test the skills they learn in the class in performance evaluations.

On the first day of class, you can ask for anyone who has difficulty reading to let you know. You need to let the class know that you will provide a reader for the exams if anyone is unable to read.

This curriculum was designed to address the learning needs of those who can read English at a 5th to 7th grade reading level. The lower the reading level, the more important visual aides and participation becomes.

This course needs to be taught in the language of the participant. This course is for participants who can speak English. The student manual has been translated into Spanish. Courses for Spanish speaking participants must be taught in Spanish.



Class size

We recommend that the maximum class size be no more than 24 participants. Limiting the class size allows for more interaction. (The state/Indian tribe in which this course is approved may have limits on class size. Check with the agency which approves training programs.)

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2. Where will you train?

How many trainees will you have in the class? Does the location have enough room for breaking the class into small groups and for hands-on activities?

The more trainees you have, the more room you will need. It is vital that the training location be comfortable. A poorly ventilated room or cramped location can make it hard for people to learn. Some of the items you will need to be concerned about are:

- ___ Location: Are there places to purchase lunch? Who manages the facility? Who do you call if there are problems?
- ___ Space: Does your facility have space for hands-on activities? You need space for setting up a decontamination chamber, stations for abatement methods, etc.
- ___ Chairs and tables: Are there enough chairs and writing surfaces for the number of trainees? Set up the tables so that all students can see and interact with each other. This is best done with a U-shaped arrangement of tables and chairs.
- ___ Temperature: Is the room kept at a comfortable temperature? Before you begin teaching, find out how to control the temperature in the room.
- ___ Noise: Is the room quiet? If you can, try to keep any outside noise to a minimum. Test the room beforehand to make sure you can be heard. In some situations, you may need to use a microphone.
- ___ Lighting: Can you alter the lighting so that people can take notes as they view slides? Find out ahead of time how to control the lighting. If possible, find a classroom with lights that can be dimmed, or with separate perimeter lighting.
- ___ Fire exits: Make sure you know ahead of time the location of fire exits in case of a fire. Make sure the building has a fire escape plan.
- ___ Emergency phone numbers: Find out ahead of time the emergency phone numbers for fire and health emergencies for the class location. Post these numbers in the class so trainees are aware of who to call in case of an emergency.

Make sure the participants are comfortable. Inform participants of the location of bathrooms, telephones, etc. State when breaks are scheduled. It is usually helpful to inform participants that they may stand if sitting is no longer comfortable and to help themselves to any refreshments (coffee, tea, etc.) whenever they want as long as they are careful not to distract other students. It is helpful to inform the participants where they can go to get food for lunch. If there is no lunch food available, participants need to be informed before the class begins.



3. Who will train with you?

For any training that lasts more than a day, there should be at least two trainers. There is too much work involved for just one trainer. You will find that as one of you instructs, the other trainer can prepare for the next training module. It is also helpful for the class to have more than one trainer because it provides a change in teaching style and expertise.

For the hands-on sessions, you also want to be able to break the class into small groups so everyone has a chance to practice the activities. This requires more than one trainer. We recommend that you not have more than 8 students per instructor for the hands-on activities (5 to 6 students per instructor is ideal).

Another reason for at least two trainers is team teaching. Team teaching is when two or more trainers teach a section together. Team teaching can help ensure that all items are covered since both of you are teaching together. It allows the class to get expertise from two sources. Even though it may mean you are in front of the class for more time, many trainers find that it can take some of the pressure off to know everything. The more you train with somebody, the better you will work as a team. It is important to support each other when team teaching. Refer to each other's statements and support each other's expertise.

Which sections require an outside expert will depend on your skills and expertise, the content of that section, and the requirements of your state/Indian tribe. For example, your state/Indian tribe may require a health professional to present the section on health effects and medical surveillance.

If you are bringing in outside experts, it is important to talk to them about their style of training. If possible, you should try to attend a training they present so that you can preview their style. Often experts are too technical in their presentations and you may find that they would not work well for your course. It is important that they tailor their presentation to your class. You can help them do this by providing a copy of your training materials on that topic and informing the presenter of the background of the participants (e.g., work experience and educational level). Encourage them to come early to sit through a session with the class before they present. Provide a break when their session is over so students can approach them individually.

Even if you decide to use an outside expert at first, do not underestimate your own ability to learn new information and instruct these topics. You can request that the outside expert work with you so that you can teach that section in the future.

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4. What training methods will you use?

The training methods you use are your choice. Be aware that this course is designed to include a minimum of eight hours of hands-on instruction. At the beginning of each chapter, there are options for how the material can be taught. We do, however, strongly recommend that you avoid teaching methods that are purely passive, such as lecturing and slide presentations. (Slides with scripts, however, are provided for all chapters.) The bottom line is that you should vary the methods you use and make them as active as possible.

On page 17 is a chart that outlines the strengths and limitations of the different methods. As you go down the chart, the training methods demand more active participation from the class participants. This manual provides you with the group exercises, discussion questions, and quizzes that are designed for active participation.

Possible Training Methods

- Lectures
- Lectures with questions asked
- Audiovisual methods (slides, video, film, etc.)
- Audiovisual methods with class participation
- Discussion
- Brainstorming
- Games
- Small group problem-solving
- Skits
- Field visits or walkarounds
- Hands-on exercises

Lectures

Lectures are the most traditional teaching method used, even though they are very passive for the class. It is very important whenever you do use lectures that you do not read from your notes or from the slides. Make sure you know the information you are going to present and that the presentation follows a clear order.

Lectures should be used to supplement the manual or to present information in a different way. If you would like to be more comfortable lecturing in front of a class, you may want to practice first. You can do this by taping yourself in private, and listening back. Another way is to have a friend or trainer listen to you and make suggestions.



Lectures with questions asked

Unless you allow people to ask you questions, they will not have a chance to clarify any points in the lecture they found confusing. The questions that are asked will also help you to improve your lecture because you will find out what interests the class and what points they need you to spend more time on. You can also pose questions to draw out participants' knowledge and cite examples to illustrate your point.

Once you become very comfortable with this format, you can be more flexible and encourage people to interrupt you with questions at any time.

You may want to tell the class at the beginning that you will not know the answer to every question they ask, but you will find the answer for them. If the question will be covered by someone else with a different area of expertise, you can ask the participants to write the question down. Then ask participants to ask the designated trainer. You can also write the question on a flipchart and keep it posted until an answer is given.

Audiovisual (AV) materials

AV materials can be a useful tool for you in your lectures. For example, slides or overheads can help you structure your lecture. You can use them to prompt your next comment. Slides are provided with each section. Again, it is important to allow the class to ask you questions.

While videos are being used more and more in training, it is strongly recommended that you use a video only to reinforce information given in the class. Do not assume that the class participants have learned the information in the video just because they watched it.

Audiovisual methods with class participation

You can make the learning process more active using slides or a video. The script notes for each chapter's slide presentations include possible questions that you can use to lead the discussion as you review the slides.

There are ways to actively involve the class in watching a video as well. Before beginning the video, have participants read the questions. Let participants know that they need to find the answers on the video. You can break the video into segments and have participants answer questions or initiate a discussion. You may also want to ask questions at the end of the video or follow it with a discussion. The manual provides possible questions to use.

Discussion

The purpose of discussions is to encourage the participants to use the information they have been learning. It avoids you giving the answers and challenges the class to come up with their own answers.

This manual supplies you with discussion questions. There may not be one single correct answer to many of these questions. Be ready for answers that may be new to you.

**Your Role: Facilitator**

Your role is facilitator, which means you must encourage the class to think, participate and learn from each other. During a discussion, it is not your job to just give the answers to the questions. It is your job to facilitate the class in finding the right answers.

- a. Students need enough time (at least 10 minutes) to read the questions and discuss some possible answers. This time will give them a chance to think on their own.
- b. The best way to ensure class participation is to create an atmosphere where trainees feel safe to say what they think without being criticized or ridiculed. You need to set ground rules at the beginning of the course. Inform participants that all questions are “good” questions and that everyone in the class will be treated with respect. During discussions, you should accept all student answers, even if you disagree with them. You can then open it up for general discussion.
- c. Rather than you making comments right away when answers are provided, give the class a chance to make comments. (“Does everyone agree with this answer?”) You will find trainees will learn from each other. Wrong answers need to be corrected carefully. Do not embarrass a participant who gives a wrong answer. Encourage them to find the correct answer. Then make sure the correct answer is clearly understood by all participants. For example, you can say: “Good try, but..” or “That’s logical, but not correct...” After trainees are finished you can add any ideas that they may have missed.

Brainstorming

Brainstorming is a teaching method that draws information out of students rather than simply listing the required information. For example, rather than telling the class the hazards found on a lead abatement job, you might ask them, “Besides lead, what are some safety and health hazards that you may run into on a lead abatement job?” Write down all the hazards the class provides on a blackboard or flip chart.

Do not argue with any of the answers given, just write them down. As with a discussion, your role is facilitator—you are trying to inspire the class to think, participate and learn from each other.

When students are finished listing hazards, compare the list they generated with your own list (keep yours hidden). They will probably have given answers that are on your list and some that are not. If they left out something you planned to cover, you should point it out and list it along with their hazards. You can also help organize the answers by putting them in categories. For example, stripper can be put under a category of hazardous chemicals.



Games

This method is useful because it allows participants to have fun as they learn. It is mainly used in this course as a way to review material, e.g., Lead Jeopardy. Some competition is good and can enhance everyone's learning. However, it is important to avoid letting the class get too competitive because some people will refrain from participating for fear of giving the wrong answers and having their team "lose." Then competition can have a negative impact on learning.

In addition, teamwork is an important component of working safely on the job. The "buddy system" is used to help people suit-up and don respirators. By emphasizing team work, you can also lessen unhealthy competition.

Small group problem-solving

This method involves breaking the class into groups of six trainees and having them solve a problem together. This manual will supply you with examples of small group exercises. Allow the small groups to work on the problem with one person in each group recording the discussion and answers. Then the class reassembles and the different notetakers report back the answers of their group, which leads to a general discussion. You can then add any points that were left out.

Skits

A number of skits are provided throughout the manual. The skits are very short but can provide lots of useful material. Not everyone is comfortable acting out the skit in front of others. Make sure you allow people to volunteer to do it. Give the "actors" a few minutes to review the skit. Make sure you have reviewed the discussion guide that follows each skit so that you are prepared to help the class analyze the skit.

Skits are particularly useful for raising social issues and providing information for how to deal with these issues. One example is the fear of losing one's job if a health and safety concern is raised. A discussion usually occurs regarding OSHA's legal protection against harassment and the limitations to this protection.

Field visits or walkarounds

If your course is longer than two days, or you can regroup people at night, you should consider a field visit to a real work setting. You must visit the site first so that you can structure the visit. Since there may be a class size of 20 or more, you must plan how you will walk everyone through the site. It is useful to develop discussion questions for your return to the classroom to ensure that participants share the information they learned on the visit.

It may not be that easy to find a site for field visits because of liability issues involved (e.g., one of the trainees gets hurt on the visit). Be prepared to deal with this concern when approaching the owner of the site. If a field trip is not an option, consider showing slides of a project you've been involved with and describing the conditions on the job site shown in each slide.

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Hands-on activities

For effective training of adults, you should include hands-on activities. This course uses a minimum of eight hours of hands-on instruction. This will require a facility that allows you to conduct hands-on activities. You will need physical space for this.

We strongly encourage the use of hands-on activities whenever possible. For example, along with lecturing about setting up a work area, have students lay down poly and attach it to the wall. If the workers have already been trained in respirators/PPE in an OSHA course, consider suiting them up for this exercise. Trainees should know firsthand how it feels to wear protective equipment and how to ensure it is working correctly.

Hands-on activities can also be used to evaluate how much the trainees have learned. Trainees demonstrate their skill in using a needle gun by actually removing paint with one. Instructors evaluate if the trainees used the equipment correctly.

We recommend an instructor-to-student ratio of no more than 1 to 8 for all hands-on activities. Check to see if your state has any requirements on the instructor-to-student ratio.



Training Methods

Methods	Strengths	Limitations
Lecture	<ul style="list-style-type: none"> • Easy way to present information • Speaker can share personal experience • Good for large audiences 	<ul style="list-style-type: none"> • Experts not always good speakers • Audience more apt to be passive • Hard to gauge learning
Lecture with questions	<ul style="list-style-type: none"> • Involves audience during or after lecture 	<ul style="list-style-type: none"> • Time may run out and limit questions
AV Materials (slides, video, films, etc.)	<ul style="list-style-type: none"> • Entertaining • Effective for large groups 	<ul style="list-style-type: none"> • Passive, "zone-out" • Too many issues
AV Materials with class participation	<ul style="list-style-type: none"> • Becomes a more active method 	<ul style="list-style-type: none"> • Takes more time
Discussion	<ul style="list-style-type: none"> • Pools experiences and ideas of group • Effective after a passive experience such as a video 	<ul style="list-style-type: none"> • Hard to do with more than 15 people • A few people can dominate
Brainstorming	<ul style="list-style-type: none"> • Listing exercise that allows for new ideas • Encourages full participation because all ideas are recorded 	<ul style="list-style-type: none"> • Can lack focus • Needs to be limited to 10-15 minutes
Games	<ul style="list-style-type: none"> • Can be very interactive • Allows for fun in the learning process 	<ul style="list-style-type: none"> • Games that are competitive may not be fun for some
Small group problem-solving	<ul style="list-style-type: none"> • Allows everyone to participate • Gives a chance to apply new knowledge 	<ul style="list-style-type: none"> • Problems may not be relevant • Needs background information
Skits	<ul style="list-style-type: none"> • Presents problem in a fun way • Allows people to play a different role 	<ul style="list-style-type: none"> • People may be too self-conscious • Need time to set up before and discuss after
Field visits	<ul style="list-style-type: none"> • Shows a real work setting 	<ul style="list-style-type: none"> • Can be time-consuming
Hands-on exercises	<ul style="list-style-type: none"> • Develops skills • Learn by doing • Easier to remember new information 	<ul style="list-style-type: none"> • Need practice time • Groups must be small • Requires more trainers

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The training methods you choose

After reviewing the entire manual, check the next few pages to compile a list of training methods and equipment you'll need to present the course.

Below is an example of a chart you could use to help organize before the training. The chart will help you prepare for your class in two ways. First, it will help you ensure you have everything you need to teach the course. Second, it will serve as a check to make sure you are using as many active training methods as possible. If you are only using slides and lectures, you probably need to branch out and try some of the other training methods presented in this manual.

For example

Chapter	Training Methods	Equipment Needed
One	Lecture/Slides	Slide Projector Slides Extension cord
	Skit and discussion questions	In student manual, page ___
	Video and discussion questions	VCR Copy questions from instructor manual, page ___

On the next page is a blank form you can use. You may need to make a few copies of it to cover all the chapters.

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5. What training materials will you need?

(See next page for equipment needed for hands-on exercises)

- chairs
 - tables (work better than individual desks for small group activities)
 - name tags
 - student manuals
 - registration forms
 - course outline
 - scrap paper
 - extra pens and pencils
 - additional handouts
 - blackboard or white board
 - chalk or white board markers
 - chalk eraser
 - flip chart
 - flip chart stand
 - colored markers
 - slides
 - slide projector
 - slide projector bulb
 - slide changer (remote)
 - extension cord
 - overhead transparencies and transparency markers
 - overhead projector
 - overhead projector bulb
 - extension cord
 - videotape
 - VHS videotape player
 - TV monitor
 - extension cord
 - miscellaneous (add your own items!) _____
-
-

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What equipment will you need for hands-on activities?

These lists can be found in the hands-on sections as follows:

Setup: Hands-On Activity page 6-12 & 14

Abatement: Hands-on Activities

Station 1: Replacement and removal page 7-16

Station 2: Encapsulation page 7-20

Station 3: Enclosure page 7-25

Station 4: Chemical stripping/removal page 7-28

Cleanup and Disposal pages 8-9 & 12

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6. How will you evaluate your training?

There are two main ways to evaluate your training. The first is by evaluating how much your participants learned in the course. You will want to know not only if participants know the information, but also if they can put it into practice. If everyone does poorly on an exam, it is most likely that the training didn't work, or that you have a poor exam. The same is true if no one is able to demonstrate the skill of proper cleanup of a work area.

The second method of evaluation is to get feedback from participants and fellow instructors on how the course went. The participants are your main source of information since they can tell you best what worked and what did not. If possible, evaluate your training, both during and at the end of it, so that you can improve it.

Evaluation of how much participants learned

1. The main goal of this course is to train participants to perform abatement work safely. An evaluation of the trainees' participation for each of the hands-on activities can help ensure that trainees have learned certain tasks. Guided hands-on experience provides the trainees the opportunity to learn by doing. After the trainee has had the opportunity to learn, the trainee's skills can be tested. EPA and most state/Indian tribe training and certification regulations require a skills assessment be successfully completed by each trainee in order to receive the final course certificate. The skills check list provided on pages 23-24 can be used to verify this evaluation.
2. An exam not only tests what people learned in your class but also can tell you which parts of the course need improvement. If no one answers a test question correctly, there is a problem with either that test question or how that part of the training was presented.

Do not forget that many people feel very anxious about taking an exam. The more comfortable you can make the trainees feel, the easier it will be for them to take an exam. Remember, you are not trying to trick a student into answering a question wrong or to provide surprise questions. You can use the exam questions as a model for review questions at the end of each training day. However, it is very important not to teach the test. Achieving 100 percent passage of the students on an exam is not the goal of this training; you are trying to determine how much each student learned.

During the initial orientation to the class, make provisions for nonreaders. Explain that if anyone can not read, has difficulty in reading or English is their second language, the course may be more difficult. Ask them to approach you the first day so that you can arrange to have a reader for the exam. Encourage them to work with a fellow student or friend who can read the pull quotes (key points from a page "pulled" into the margin for emphasis) and key facts with them each day of the course.

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While an exam is not included in this manual, there are questions you can draw from the learning objectives, pull quotes, and key fact in each chapter. The Lead Jeopardy game can also be a source of questions for an exam.

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Sample hands-on skills assessment

Name _____ Date _____

Instructions: Take this check list with you to each hands-on station that you go to. Make sure that you complete each station. Have the station instructor initial the skills you have demonstrated. Return this check list at the end of each day. This form becomes a part of your training records and must be kept by the training center.

Instructor's initials

Chemical stripper

- MSDS hazard identification _____
- Appropriate protective gear: Identified/worn _____
- Set up area _____
- Application _____
- Removal _____
- Clean up _____

Encapsulant and enclosure

- MSDS hazard identification _____
- Appropriate protective gear: Identified/worn _____
- Set up area _____
- Application of encapsulant _____
- Caulk & enclose _____
- Clean up _____

Heat gun & wet scraping

- Tool hazard identification _____
- Appropriate protective gear: Identified/worn _____
- Set up area _____
- Proper use of heat gun _____
- Proper wet scraping _____
- Clean up _____

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Instructor's initials

Final cleanup

- HEPA vacuum (vac) _____
- Wet wash _____
- Repeat HEPA vac _____

Disposal

- Debris properly wrapped or bagged _____
- Equipment cleaned _____

Worker decontamination

- Worker adequately decontaminates _____
- Worker properly disposes/stores PPE and tools _____

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Evaluation of the course

A written evaluation can be filled out by the participants at the end of each training day or at the end of the training. (See pages 28-29 for a sample evaluation.)

A verbal evaluation is a quick way to get feedback from the participants. This is when you ask the class directly what parts of the training are going well and which are not. It can be as simple as “What parts of the chapter on health effects were hard to understand?” You may want to do this after a very technical chapter, at the end of the day, and at the end of the training.

Peer evaluation is where you and the other trainers get together and discuss what went well and what parts of the training need improvement. You may observe that some teaching methods are working better than others and change the methods for the remainder of the course. In addition, you will want to discuss who is participating in the class and who is not. This can aid you in making sure all trainees are as active as possible.

Your meetings as trainers can be simple and informal. You may want to meet at the beginning of the day to review the goals for that day. You may also choose to meet after each training day and the end of the course to determine what is working and what is not.

Avoiding instructor burnout

All trainers are at risk for “burnout.” This can happen for many reasons, such as:

1. you are conducting too many trainings;
2. you do not have enough people training with you;
3. you feel unable to stay up-to-date with new information on lead abatement;
4. you are not sure your training methods are successful.

Reasons #1 and #2 imply excessive demands being put on you in your role as an instructor. One possible solution is to train other people to teach with you. Even if you have to help train these new instructors, in the long run it will help avoid burnout.

Reasons #3 and #4 can be addressed if you can get additional training or professional development for yourself.

Since lead abatement work is still an evolving field, you will need additional information and training to stay up-to-date as a trainer. Laws, building materials, work practices, etc., can all change in a short time period. Your training organization will need to ensure that you stay current. You can do this by attending conferences and training and subscribing to newsletters and magazines.

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Teaching is an art; you will always want to mold and change the techniques you use in your course. Enroll in a short course on adult education techniques, often called a “train-the-trainer” course. These are the kinds of courses that can provide additional skills to instructors. In addition, it may be helpful to attend an annual refresher course on adult educational techniques.

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Lead Abatement Worker Training Course

Sample 2-day course outline: overview

Day

Chapter	Topic	Time Allotted
Day 1	Introduction/Exercise	1/2 hour
Chapter 1	Where and What Is Lead?	1 hour
Chapter 2	Health Effects	1 hour
Chapter 3	Regulations and Laws	3/4 to 1 hour
Chapter 4	Identifying & Evaluating Lead Paint Hazards	3/4 hour
	Hands-on	1 hour
Chapter 5	Controlling Lead Hazards	1 hour
Chapter 6	Setup	3/4 hour
Day 2	Review/Lead Jeopardy (opt.)	1/2 hour
Chapter 7	Abatement Methods	3/4 hour
	Hands-on	2 hours
Chapter 8	Cleanup, Disposal & Clearance	3/4 hour
Chapter 9	Soil Abatement and Exterior Dust Cleanup	1/2 hour
	Hands-on	1 hour
	Final Review/ Lead Jeopardy	1/2 hour
	Final Examination	1 hour

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Note: Many of the chapters have “hands-on” activities included in the chapter (e.g., skits, small group discussion, role plays). The time spent on those activities (which will vary depending on which activities the instructor uses) should be added to the hands-on activities listed above for a total amount of time spent doing hands-on versus lecture. It is important to check with the state/Indian tribe in which the training is approved to determine how many hours of “hands-on” activities are required.



Sample Student Evaluation Form

1. Did the training provide you with the information you need?

Yes Somewhat No

Comments:

2. Was the information:

Too technical Just right Too easy
(not technical enough)

Comments:

3. Do you think the training will help you make your lead abatement work safer?

A lot Some A little Not at all

Comments:

4. How would you rate the instructor(s)?

Trainer #1 Poor Fair Good Excellent

Trainer #2 Poor Fair Good Excellent

Trainer #3 Poor Fair Good Excellent

Trainer #4 Poor Fair Good Excellent

Comments:

5. Overall, how would you rate this program?

Poor Fair Good Excellent

Comments:

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6. How could the training be improved?

7. How would you rate the course notebook/handouts?

____ Too technical

____ Just right

____ Too easy
(not technical enough)

Comments:

8. What are some other issues of lead abatement on which you would like additional training?

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Course introduction

Instructor's notes

This session is your opportunity for the class to find out about each other and to give them a preview of how the course will be taught. It is vital that you encourage participation as soon as possible so trainees do not think the course will be a lecture format. In addition, it is an opportunity for you to find out what each trainee hopes to achieve by attending the training.

On the next page is a menu of options for conducting the Introduction. It is suggested that you allow 30 minutes to cover this material.

Training methods

It is recommended that you do either A and B or A and C

- A. Class business 15 minutes
- B. Introductions (Option 1—Page 33) 20 minutes
- C. Introductions (Option 2—Page 35) 15 minutes

Class business

1. **Certificate.** In all states/Indian tribes no one can permanently eliminate lead-based paint hazards from a residence or child-occupied facility without being certified or licensed as a lead abatement worker or supervisor. You will need to know what your state's/Indian tribe's specific requirements are and ensure that your training is approved. (If the state/Indian tribe in which the trainees work does not have an approved program for accreditation/certification of individuals, the individuals **and** companies must apply to EPA for certification.) Make sure you have copies of the relevant state or tribal certification applications available for the students.
2. **Attendance.** You should inform participants that they must attend all of the training. If anyone has a conflict they should speak to you. If they don't attend the entire class, you cannot provide them with a certificate of completion for the course.
3. **Exam.** If you are using an exam and hands-on evaluations (skills assessments), let students know that, so it will not be a surprise. You can give them sample questions throughout the course. Let them know that the exam and skills assessments are to ensure they know how to do the work and how to protect themselves, not to try to trick them. Make sure they understand what the acceptable grade is to pass this course.



4. **Reading ability.** If anyone has trouble reading English, let them know that you can help them as long as you know they have difficulties. People will not tell you about their reading problems in front of the whole class. Make sure you provide an opportunity for them to let you know in private about their problems with reading. Ask students to approach any one of the instructors before the end of lunch time on the first day.
5. **English as a second language.** It is likely that you will have people in your class who have a language other than English as their first language. Some people speak and understand English well, but may have trouble reading in English. You will want to know this ahead of time and include questions on your registration. If Spanish is their first language, the student manual is available in Spanish.
6. **Training methods.** Inform the class that you will not be lecturing for the entire training—in this class, we are all learning together. No one has all the answers all of the time, although we all have questions. Participants can help you improve the training by giving feedback.
7. **Review course outline.** The outline covers each individual day and will let the students know what to expect. Make sure to mention when breaks will be.
8. **Introduce the manual.** Encourage the participants to write their names on the manual. Orient the students about how to use their manual. Let them know that the manual is their “Lead Bible.” Show them the different parts of the manual:
 - table of contents
 - resources section
 - glossary

Review how to look up a subject in the manual through the table of contents. Also, point out the references at the end of each chapter and that they can order most of them through the National Lead Information Center at 1-800-424-LEAD. Inform them that many of the references are free or cost \$5.00 or less.

Point out the Pull Quotes and the Key Facts at the end of each chapter. Also point out the List of Abbreviations and Units of Measure at the end of the *Course Overview* chapter in the student manual. Inform the class that they can use these as a study guide for the exam. Students should also be encouraged to use these sections as a quick reference on specifics they might have forgotten months after the training is completed.

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9. **Logistics.** Point out the fire escapes, designated smoking areas, bathrooms, emergency phone number, and phones for their use, etc.
10. **Breaks.** Inform the class that there are breaks scheduled into each day.

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**Introductions (Option 1)****(20 minutes)**

Purpose: This exercise will allow trainees to get to know each other and to begin to share their experiences. It will also allow you as the instructor to get a sense of who the trainees are and what expertise they may bring to the class.

Materials: Large Flip Chart, Markers, Tape

Directions: Have the class form pairs and have each person interview his or her partner. Each interview will consist of name, work experience, exposure to lead, and a goal that the person wishes to achieve by the end of the class. Then everyone will introduce their partner to the whole class.

Write their responses down on a flip chart.

Name	Work experience	Exposure to lead? (Specify that this is not a yes/no question!)	Goals
------	-----------------	---	-------

You will find that people have a wide variety of work experience. This may help you in teaching the course. There may be people in the course who know more than you about certain aspects of construction, bid specifications, etc. If no one mentions housekeeping, you may want to mention it. This gives you a chance to stress the importance of cleaning on a lead abatement job. Let participants know that you will draw on their expertise throughout the course.

Make sure you introduce yourself and give your own background!

Participants' responses to the third column, "exposure to lead," will give you a sense of how much they know about lead. While not everyone will have a job exposure to lead, we all have been exposed to lead in our environment. Many of us have hobbies that expose us to lead, such as fishing (sinkers), hunting (bullets), stained glass (solder), etc. You can come back to this column at the end of this session and fill it in more completely.

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The last column, “goal for the course,” will be useful for you to review to make sure trainees’ goals are realistic. In addition, you should keep the paper posted and have each trainee check off his/her goal after it is covered. This will let you know during the course whether you, as a trainer, are meeting the needs of the trainees.

Note: The advantage to this exercise is that people begin talking to each other in the class. It also allows you to introduce the concept of the “buddy system” by dividing trainees into pairs.

**Introductions (Option 2)****(15 minutes)**

If you have less time available, use this variation of the introduction exercise. This is not as effective as the introductions exercise explained in the previous section.

Directions: Go around the room and have each person say his/her name, work experience, any exposure to lead and personal goals for the class.

Write their responses down on a flip chart (as in the first introduction exercise).

Name	Work experience	Exposure to lead? (Specify that this is not a yes/no question!)	Goals
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