



H.E.L.P. FOR KIDS PROJECT

CHILD CARE HOME ENVIRONMENTAL REVIEW

INSTRUCTOR GUIDE

COURSE GOALS:

After completing the course, participants should be able to:

- ② Use checklists included with course materials to identify hazards to children's health in child care home environment.
- ② Communicate with the child care provider regarding hazards identified and follow-up steps. Motivate the provider to correct the problems.

Introductions

Time: 15 minutes

- 1) Introduce all instructors.
- 2) Invite participants to introduce themselves, including this information:
 - a) Why are you here? How do you expect to use what you learn in this course?
 - b) Any prior experience with assessing and solving environmental hazards? Any other experience working with child care providers? If so, please describe that experience.

Overview

Time: 15 minutes

- 1) Provide a brief overview of the project by presenting Overheads 1 - 4.

- 2) Review the agenda and comment briefly on each section so participants know what to expect and have a sense of how the course fits together.
- 3) Tell students there is a note-taking outline they may wish to use in the Student Manual.
- 4) Give participants an opportunity to ask questions about the agenda as needed.
- 5) State the policy on break time. It is strongly suggested that breaks occur roughly after each hour and a half of material. You may also want to adjust the time for the lunch break depending on logistics associated with the specific location.

Hazards Triangle

Time: 50 minutes

Objectives:

- ② Participants will be able to explain how the hazards triangle may be used to analyze child care home hazards.
- ② Participants will be able to use an assessment tool to identify sources and transport mechanisms for hazards.

- 1) On a flipchart or overhead, draw a *triangle* with one point at the top (or use prepared Overhead 5). At the top of the triangle, draw a stick figure human. On one other point, write “hazard source.” On another, write “means of exposure.”
- 2) Explain that you are introducing them to a way of thinking about hazards and human safety that is basic to their work with the checklist.
 - a) In order for an indoor environmental problem to occur, there must be a source of hazard, a person to be affected, and a means of exposure to bring the two together. (Humans experience threats to safety only if exposed to a source that has some undesirable effect.)
 - b) The “means of exposure ” is the way someone comes in contact with the hazard. Sometimes the hazard is transported to the person (for example, a contaminant carried on the wind); other times people walk into a dangerous condition. Some hazards, like a toy on a stair, cause the damage from outside the body. Others,

like an air or water contaminant, must be inhaled, swallowed or absorbed through the skin.

- c) The *extent of injury* depends on the degree of threat posed by the hazard, details of the exposure, and the vulnerability of the individual.
 - i) For example, how badly a person is injured by falling off a ladder depends on how high the fall, the surface they land on and how they land.
 - ii) In addition, a small child, a pregnant woman, or an elderly person might experience more serious consequences from the same situation. A fall from a step ladder may be a close call, or result in a strained muscle or a broken neck.
- 3) (Optional) Lay out the three elements in a *linear* fashion. Either the flipchart or transparency will work.
 - a) Source on left
 - b) Means of exposure in the middle
 - c) Occupant on the right
- 4) Work through an example with the class using the following process.
 - a) Ask participants for an example of a hazard.
 - i) Example: carbon monoxide
 - b) Ask participants what the health effects of carbon monoxide would be.
 - i) Examples: oxygen deprivation, headaches, dizziness, nausea, convulsions and death
 - c) How might carbon monoxide get into a person's body to cause harm?
 - i) Inhalation
 - ii) Explain that other "routes of exposure" for substances are dermal (exposure to the skin) or ingestion (eating or drinking).
 - d) Ask participants for examples of carbon monoxide sources.
 - i) Example: for carbon monoxide, auto engines, furnaces and boilers.

- e) How would someone get exposed to carbon monoxide?
 - i) Leaky mufflers, running the car in the garage, backdrafting furnace or boiler
- f) What would affect how much of this (i.e., dose) the person took into the body?
 - i) The *length of time the person is exposed* and the *amount of substance* will determine whether the person gets headaches, becomes unconscious and recovers, or actually dies.
 - ii) The effects of this amount of exposure may be different depending on factors such as the person's size and age.
- 5) Introduce the topic of control or protection.
 - a) Staying with the carbon monoxide example, consider the various means of exposure identified and discuss how control might occur.
 - i) Example: Fix muffler, change behavior (don't run the car in the garage), fix the furnace or get someone to fix it, wear protective equipment to prevent inhalation, remove the humans from the hazardous situation until it can be corrected.
- 6) Project Overhead 6 and 7. (These charts are also found in the Student Manual)
 - a) Use Overhead 6 and/or 7 to work through an example at the overhead projector with the class, moving left to right. Define the contents of each box and use the written example of "combustion products" to show how to use this analytical tool.
 - i) *Hazard*: Something that can cause harm to human beings.
 - ii) *Potential Effects*: What harmful effects could result from exposure to the hazard.
 - iii) *Sources*: Where hazards are produced or encountered by humans.
 - iv) *Exposure Mechanism*: What must happen to result in human exposure to the hazard – for example, eating a poison, tripping over a cord or ladder.
 - v) *Means of Control*: What can be done to prevent the event from occurring by any of the identified relevant means of exposure.

- b) Refer participants to the Student Manual, which is a blank exposure chart.
- c) Assign each table group a hazard. Possible hazards are those for which completed forms are available. (However, do not point out the completed forms until the exercise is through).
- d) Hazards include:
 - i) Allergens: pets, pests, mold
 - ii) Toxins: lead, pesticides, combustion products, dry cleaning chemicals, moth balls, cleaning products, tobacco smoke, paints and varnishes, household plants
 - iii) Irritants: particles, cleaning products, combustion products, tobacco smoke, formaldehyde
 - iv) Pathogens: food borne, waterborne
 - v) Carcinogens: asbestos, radon, combustion products, tobacco smoke
 - vi) Flammables
 - vii) Burns, falls, electric shock, water (drowning), suffocation
- e) Give participants about 10 minutes to complete the chart as a group.
- f) Have each table group present its table orally (as time allows).
- g) Correct any misconceptions and encourage group members to add additional material as time allows.
- h) Show participants completed tables in the Student Manual and invite them to share their group's chart with the one in the book. Suggest that these are useful references to consult as they prepare to do home reviews.

Key Strategies to Improve Environmental Quality in a Building

Time: 10 minutes

Objective:

- ② Participants will be able to describe thirteen basic strategies to improve environmental quality and explain the principles on which they are based.

Project Overhead 8, “Key Strategies for Improving Indoor Environments”

Explain that these are overarching strategies; details will be addressed in the checklists and in the slide lecture to follow. Discuss each of the strategies very briefly. Use a paper to reveal only one at a time.

Review the points on the overhead. Briefly explain the importance of each of the strategies:

- 1) Identify occupant health needs.
- 2) Identify occupant behaviors that increase or reduce exposures.
- 3) Make sure combustion equipment is tuned, maintained, and drafts well.
- 4) Keep buildings dry.
- 5) Stop dirt at the door.
- 6) Control pests using Integrated Pest Management.
- 7) Make the child care home lead-safe.
- 8) Do a thorough cleaning twice a year to remove stored particles.
- 9) Exhaust ventilate stationary sources of contaminants and moisture.
- 10) Provide dilution ventilation to control occupant-generated contaminants.
- 11) Test for radon.
- 12) Eliminate safety hazards.
- 13) Purchase fewer hazardous supplies and chemicals -- use these sparingly.

Hazards and Control: Slide Presentation

Time: 2 hours (includes 15-minute break)

Objective:

The participant will be able to list and identify hazards commonly found in particular areas and suggest possible protection strategies.

Approximately 100 slides have been provided. To provide flexibility alternates have been provided for some of the slides. In the amount of time allotted you can probably cover around 70 slides. Select those which best fit your climate and situation.

Forms Review

Time: 30 minutes

Objective:

Participants will understand how to introduce the child care-specific questions on the indoor environment using a generic state checklist during the course of an inspection.

- 1) Review a list of supplementary materials (bibliography, references, handouts, etc.) handed out to participants. Briefly discuss the scope and utility of each resource. Refer students to the Student Manual for this list.
- 2) Review each of the following three checklists and action plans included with student materials. Discuss their intended use during and after the course. These include:
 - a) A full home checklist with some additional questions pertaining to child care. This checklist is appropriate for community members who come across a child care during their assessments, or for child care providers interested in a self-assessment.
 - b) An abbreviated version of the full home checklist – known as the “generic” state checklist - that can be used by state child care inspectors/monitors as a voluntary supplement to their normal inspection items. The only items that will be abbreviated in this checklist are those pertaining to normal home hazards – all of the child care-specific items are retained. The checklist includes some items that the states may already inspect/assess, because those items vary from state to state.
 - c) For the New Mexico pilot, Student Manual materials will also include a much shorter checklist specifically for the State of New Mexico that deletes those items from the ‘generic’ state checklist that NM already inspects/assesses.

Review/Walkthrough, Child Care Home

Time: Two hours

Objective:

The participant will be able to complete a checklist of indoor hazards during a child care home review/walkthrough and discuss their findings with the child care provider.

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- 1) Assign students different sections of the checklist on which to take the lead.
 - 2) The instructor stays with the student taking the lead, offering support immediately as needed, asking questions of the student and pointing out important things the student misses.
 - 3) An experienced student or the instructor handles directions for follow-up action.

Debriefing, Child Care Home Review/Walkthrough

Time: One hour

Ask participants to answer questions such as these:

- 1) What did we find in this child care home setting that had the greatest implications for harming children?
- 2) How likely do you believe this provider is to correct these problems? If not very likely, what could have been done differently, if anything, to increase his or her motivation to make changes?
- 3) How comfortable or uncomfortable were you in doing the review? Encourage participants to share with each other ways of increasing their own comfort level they found effective.
- 4) What did you see others do that you thought worked well and you might like to try?
- 5) What would you change in your own inspection and questioning process?

All parts of the home child care checklists should be assigned.

Evaluation

Time: 30 minutes

Administer the course evaluation.