

Environmental Health Assessment of the Community Project Guidelines

Note: This is a multi-phase group project that needs to be done over a 12-week period. Other materials needed for this project are: Environmental Health Assessment of the Community: Timeline/Planning Guide, and Windshield Survey Guide.

Project Goal: Use the nursing process to promote health and prevent disease in a community by identifying and reducing sources of health risks in the community environment.

Process:

1. **Assess** the community to identify a potential environmental health hazard that will become your project “focus issue.” This assessment is a multi-phase process that will take place over the first seven weeks of your project.

- a. Week One

Start-Up Meeting: Your group needs to meet to accomplish two broad tasks:

Identify the community that will be the subject of your project. Choose a small city, town or township that has a commercial, industrial, or agricultural hub surrounded by residential areas. Determine a zip code for the community (www.usps.gov → “find zip codes”).

Decide upon the tasks and responsibilities of each group member and deadlines for each task. Use the “Environmental Health Assessment for a Community: Timeline/Planning Guide” for this activity.

Note: It would be a good idea to set up a regular meeting time for the group (for example: every week, immediately following a certain class).

- b. Weeks Two – Five

Assessment Phase I: Identify Focus Issue

Identify and Meet with Community Group: For the assessment, planning and intervention phases of your project, you will need to be working with an organized group in the community. You will meet with them at least twice. At the first meeting, you will get input from them about issues of concern. At the end of the project, you will provide them with an educational program that addresses one of those concerns.

To identify possible interested community groups, consult local resources. Here are some possibilities: Go to the local library and look at bulletin board postings. Scan local newspapers for articles or calendars of community

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programs that might name appropriate community groups. Contact the local hospital about special interest health group meetings (such as parenting programs). Call local day care centers to inquire about the possibility of addressing a parent group meeting.

*Contact your chosen community group, explain who you are and your plans, and make arrangements for addressing the group two times. The purpose of the first meeting will be to find out about environmental health concerns within the community. At the second meeting, you will present an educational program about one of those concerns. *The first community meeting should be set up for Week 4 or 5 of your project, and the second one should be set up for Week 11. Both meetings should be arranged at this time.**

Note: When contacting community groups, explain that you are a group of students from ___ School of Nursing, and you are working on a project that involves identifying a possible environmental health concern in the community. Explain that your group will be researching that concern and then providing an educational program about it. You are wondering if ___ group would be interested in helping to identify concerns and receiving an educational presentation. This would entail two meetings with the group: one during the week of ___, and the other during the week of ___.

Plan your meeting. After introducing yourselves and explaining your project, you will need to get input from the group about their environmental health concerns. This will include use of a brief questionnaire which will give you a quantitative evaluation of the concerns of the group, and it will also help to stimulate and guide the discussion. This questionnaire can be filled out by group members before or during the meeting, or you may wish to administer the questionnaire as a group discussion activity. If you use this approach, though, remember that there needs to be some method for recording the answers to questions (such as notations on a flip chart, or a member of your group noting hand counts).

To develop your questionnaire, refer to the following resource: Mississippi Delta Project, Module 4 (Assessment), Appendix D, located at www.sis.nlm.nih.gov/Tox/ToxMiss (Module 4, pg.67ff). Remember: you want to keep your questionnaire brief. You may want to do your windshield survey and review of print and electronic resources (see below) before developing this questionnaire to help you identify areas of focus.

Hold your first (assessment) meeting with the group.

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*With the prior approval of your professor: **Meet with County or City Health Department** to get input about local environmental health issues and strategies that are being used to address them. *Before beginning this project, talk with your professor regarding health department contacts and suggested approaches.* Most health departments have an environmental health section, but you may also want to meet with community health nurses including those working in maternal/child health. The city or county health department probably has a website that outlines its structure and key personnel. This website may be linked to the State website (see “Review Electronic Resources” below).*

Note: When contacting the Health Department, explain that you are a group of students from ___ School of Nursing and you are doing a community health project that involves assessing environmental health issues in a community. You would like to meet with them to find out what programs they have for assessing and addressing environmental health issues, and you are interested in finding out what the primary environmental health concerns are for this community.

Review Print Resources as a means of identifying possible environmental health issues. At a minimum the resources you should seek are:

- *A local map.* Look for indications of land use: commercial and industrial activities, waste sites (landfills), school, recreational areas... Also look for natural areas of significance: streams and other waterways, hills or mountains...
- *Local newspapers.* You can find local newspapers at the library. Scan papers from at least the past six months to identify possible issues related to environmental health.

Review Electronic Resources to learn about the demographics of your community, as well as indicators of local environmental health issues. You should also review some general background information about environmental health issues.

Note: Whenever you consult electronic resources (and any other resources), be careful to evaluate the source of the information. Is it from a government agency, or from an interest group? Are the primary sources of the information cited in such a way that you could locate them...or are the sources of information vague?

Sources you should consult include:

Community Demographics and Local Environmental Health Issues:

- U.S. Department of Health and Human Services Community Health Status Indicators Project: www.communityhealth.hrsa.gov
- Environmental Protection Agency: www.epa.gov → “Where You Live” (links to multiple sources of local information)
- State websites: www.state.xx.us (xx = state abbreviation)
- Environmental Defense Fund: www.scorecard.org

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General Environmental Health (for more resources, see Community Environmental Health Assessment Resource at www.envirn.umaryland.edu → assessment → community)

- Healthy People 2010 resource: www.nlm.gov/partners → HP2010 Information Access Project → environmental health
- Environmental Protection Agency (EPA): www.epa.gov

Perform a Windshield Survey of your community, utilizing the “Windshield Survey Guide.” The entire group should participate in this activity, with at least two people per vehicle (a driver and at least one recorder).

Meet to determine your focus issue, based on your findings from all of the assessment activities performed so far.

c. Weeks Six – Seven

Assessment Phase II: Learn About Focus Issue

Research professional journals, other printed materials, and internet resources for information about your focus issue.

Also talk with community experts, or consult any other resources that would be helpful. This is in preparation for your educational program with the community group. Information that you want to know includes:

- Background information about the sources of the problem (where does the problem originate, what human or biological processes affect its activity in the environment)
- What specific toxic substances are involved?
- Acute and chronic health effects, including special susceptibility of specific populations (such as children, pregnant women)
- Extent of exposure in the community; specific populations who are exposed
- What steps can community members take to protect themselves and their families from harm?
- What can community members do to prevent the problem from occurring?

There are *many resources* that may be helpful. A detailed list is included in the Community Environmental Health Assessment Resource at www.envirn.umaryland.edu → assessment → community. For information on specific toxins, key resources include:

www.atsdr.cdc.gov (especially “toxicological profiles”)

www.sis.nlm.nih.gov (especially “TOXNET”)

For professional journals, conduct a literature search at your school library. The Healthy People 2010 resource noted above (www.nlm.gov/partners) provides a “ready made” literature search on environmental health topics.

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Weeks Six – Seven, continued

Community experts can include a wide range of people and organizations, including the health department, industry leaders, medical and nursing personnel in hospitals and offices, citizen groups. Brainstorm who might be helpful to you, and think back to the information you gathered in the process of identifying your community group and your focus issue.

2. **Plan** community education program

a. Week Eight

Confirm the date and time of your educational meeting with a representative of your community group.

Plan the materials for the education program.

Develop objectives for your program. These should be measurable behavioral objectives, and you will evaluate whether you have met them when you do your evaluation of the program. As a group, informally brainstorm what you would like your audience to get out of this program, and what you would like them to do differently as a result of the program. Jot these informal ideas down, and then develop them into final form. Finalized objectives should be in the format of the following example:

By the end of this program, participants will be able to:

- Define ground-level ozone
- Name 3 sources of ozone precursors (“ingredients”)
- Name 2 actions they can take to decrease the occurrence of ground-level ozone
- Name 2 actions they can take to decrease health risks related to ground-level ozone

Plan discussion/lecture content. Develop an outline of your presentation based on your objectives, and decide who will deliver which sections. Each individual should then develop the specific material in his/her own words, and develop presentation notes according to personal preference (see “Implementing Community Education Program” below).

Plan audiovisuals. These materials can be in the form of objects, slides, overheads, posters, or computer-based powerpoint slides. You may want to decide on audiovisual content as a group, or you may want to develop audiovisuals individually as part of preparation of specific sections of the program (see “Implementing Community Education Program” below). In any case, you should agree on the type of audiovisuals you will be using, and make sure the appropriate equipment will be available.

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Week Eight, continued

Plan handouts. Handouts should include brochures or other materials from public health organizations, as well as materials that you develop (see “Implementing Community Education Program” below). You may wish to duplicate all or some of your audiovisuals, and you should plan to provide a resource list of internet and print materials.

Plan evaluation form. The evaluation form should include two brief components: subjective/qualitative evaluation of the quality of the program and quantitative assessment of the degree to which your objectives were met. The first component should consist of several questions that obtain feedback about people’s perceptions of the overall quality of the program, evaluation of each speaker, and evaluation of audiovisuals and handouts. The second component should be in the form of a brief quiz that evaluates the success of your objectives. This quiz may take the form of a game, as long as you can record the responses accurately. See “Implementing Community Education Program” below for details.

3. **Implement** community education program

a. Weeks Nine – Eleven

Develop the materials for the education program.

Develop discussion/lecture content based on the objectives and outline developed in week eight. Each individual should write the material for his/her section of the content in his/her own words, and develop presentation notes according to personal preference and style. Some people like to put key subject matter on flash cards, while others prefer to type a detailed outline. Whatever style suits you, make sure that you plan to use your notes for reference, rather than reading your material out loud during the presentation. Also, be sure to incorporate interaction with the audience into your talk by asking discussion questions or using a learning activity.

Develop audiovisuals according to the plans made in week eight. Audiovisuals should be used to emphasize key points or provide graphics (pictures, tables, charts) that help to clarify the content of the presentation. Be careful to avoid the common pitfall of putting your entire presentation in audiovisuals, which results in an impersonal program during which both the speaker and the audience are reading slides.

Develop handouts. Contact appropriate public health organizations for brochures, and develop your own materials according to plans made in week eight. Remember to develop a resource handout. It is important to write your

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materials at the appropriate reading level. See E.H. Winslow (2001): Patient Education Materials. *AJN* 101(10):33-38 (available on line at www.nursingcenter.com).

Write the evaluation form for the program. This form should be brief (no more than one page, with ample spacing and moderately large type). Begin with a one or two-sentence introductory statement of purpose such as: "Please take a minute to fill out this form. Your comments are very important to us and will help us in planning future programs."

The first portion of the evaluation should ask people to rate the overall program, each speaker, handouts and audiovisuals using a scale. The scale can involve excellent/good/fair/poor rating options, or it can be a Likert scale such as: 0-5, with 5 being the best and 0 being the poorest. Include space and a notation for comments after each category.

The second portion of the evaluation should involve several questions that evaluate whether your objectives were met. You may want to introduce this section with a statement such as, "Help us to know how well we did by answering these questions." Ask 2 or 3 simple multiple choice questions based on your objectives. (Alternatively, you may choose to use a game format, but you must be able to record the responses.) Also include at least one question that identifies whether they intend to actually change a behavior as a result of the program (for example: "Do you have any new ideas about ways to decrease smog or avoid getting sick from it? Please tell us what you're planning to do.")

Present the program. Relax and enjoy the experience! Think of it as a time to get together with some people to share information and ideas (indeed, that's exactly what it is). Dress professionally, but appropriately for the environment.

4. Evaluate the program

a. Week Twelve

Review and summarize the feedback from the evaluation forms and ***evaluate whether your objectives were met*** by tallying the quiz scores. If possible, ***follow up with the group*** in 4-6 weeks to see if they have any new questions or concerns. Try to evaluate whether they have put their intended plans into action by asking questions such as, "Some of you were planning to.... how has that gone? Have you run into any problems?"

This material was developed at the Environmental Health Education Center of the University of Maryland School of Nursing. For more information, see envirn.umaryland.edu.

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