

Teaching the Ten Essential Services of Environmental Health: A Tipsheet

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Introduction

The Ten Essential Services of Environmental Health (10 ES) are important for the field of environmental public health. They can help guide agencies to fully incorporate the core functions of public health – assessment, policy development, and assurance– into their operations. The 10 ES also help agencies be better prepared in times of emergency. To enable environmental public health professionals to use the 10 ES in their practice, they should learn about using the 10 ES while they are learning the skills they will use in their profession.

Environmental public health students, to be best prepared, should know what the 10 ES are, how they apply to the field of environmental public health (different levels of activity, different uses), and skills for performing each of the 10 ES (skills for communication, community outreach, data interpretation, study design, etc).

10 Essential Service of Environmental Public Health

1. *Monitor* environmental and health status to identify and solve community environmental health problems
2. *Diagnose and investigate* environmental health problems and health hazards in the community
3. *Inform, educate and empower* people about environmental health issues
4. *Mobilize* community partnerships and actions to identify and solve environmental health problems
5. *Develop policies* and plans that support individual and community environmental health efforts
6. *Enforce laws* and regulations that protect environmental health and ensure safety
7. *Link people* to needed personal environmental health services and assure the provision of healthcare when otherwise unavailable

8. *Assure* competent environmental health and personal healthcare workforce
9. *Evaluate* effectiveness, accessibility and quality of personal and population based environmental health services
10. *Research* for new insights and innovative solutions to environmental health problems

How to Use These Resources

This toolkit contains a few resources with information and guides:

- 1) This document, "Teaching the Ten Essential Services of Environmental Health: A Tipsheet"
- 2) "Ten Essential Services of Environmental Health: Examples and Resources." This resource contains information about the ten essential services for anyone, but especially for instructors.
- 3) "Three Case Studies" to help teach the Ten Essential Services of Environmental Health
- 4) "Courses-ES matrix" that compares the courses in an EPH program to the 10 ES

Feel free to take a look at the resources. You may wish to discuss this topic with your academic department to gain support and find out who is already teaching the 10 ES. It will be up to you and your colleagues to decide how this information might best be used in your department. Once you have decided what you hope to do with the 10 ES, make a plan to, for example, teach necessary skills or incorporate the 10 ES into courses.

Reasons to teach the 10 ES

- ❖ Students, as future environmental public health (EPH) professionals, should be aware of the 10 ES; the field of EPH will benefit.
- ❖ The 10 ES make a very useful teaching tool. For example, they may be used as a point of reference to relate different kinds of skills students are learning about.
- ❖ The 10 ES can be a common theme that ties a variety of courses together
- ❖ The 10 ES may be used to shape or evaluate a program's overall curriculum (using, for example, the "Course-ES matrix" document).

We recommend:

- 1) Assessing the extent to which the overall environmental health curriculum is already incorporating and teaching
 - a. skills needed to perform the 10 ES (for example by using the Courses-ES matrix)
 - b. the 10 ES as a concept and a tool for program design or evaluation
- 2) Determining ways to teach students skills that apply to various ES through current courses. (i.e. skills for community outreach, study design, social marketing, monitoring data trends). By the time they earn their degree, students should know basic skills applicable to each of the 10 ES.
- 3) Teaching students how the 10 ES can be used as a tool for designing EPH projects or as a guide for program evaluation. (see below for tips)
- 4) Standardizing case studies that instructors use to teach their topics so the case studies can be related to the 10 ES, shared across classes, and used to show how skill areas are interrelated.

Overall tips for introducing EPH students to the 10 ES

- 1) In a staff meeting, discuss the 10 ES and how they are useful to students and the field of EH so that instructors know what the 10 ES are and why the 10 ES are important to teach.
 - i. *A resource:* Carl S Osaki, Deborah Hinchey, Joy Harris. Using 10-Essential-Services Training to Revive, Refocus, and Strengthen Your Environmental Health Programs. *Journal of Environmental Health*. Denver: Jul/Aug 2007. Vol.70, Iss.1; pg. 12,
- 2) Introduce the 10 ES to all students in an introductory class or seminar or in a course that students tend to take early in their course of study. Consider quizzing the students on the 10 ES.
- 3) Find ways to integrate mentions and uses of the 10 ES into various courses (see next section)
- 4) When instructors teach skills that apply to the 10 ES, they could explain to the students how the skills apply.
- 5) Use the 10 ES in a Capstone course with case studies that unify many of the skills and concepts students have learned over their course of study. (see document with 3 Case Studies)
- 6) Design practicum/internship opportunities around the 10 ES, for example, in which students work with a health department to help them assess an individual program or their broader

activities to see how well they fulfill the 10 ES, then write up their assessment.

- 7) Design special projects, for example, where students use the 10 ES as a guide for planning a project or they collaborate with a local public health agency, to either examine EH activities using the 10 ES.
- 8) Use the Essential Services of Environmental Health CD-ROM as resource and guide (to request a copy, go to <http://www.nwcphp.org/training/courses-exercises/courses/essential-services-of-environmental-health>)

Example Exercise #1 for introducing the 10 ES:

- Ask the class "What general/broad categories of tasks should environmental public health workers do?"
- Ask students to create a list. (the instructor may have to guide students in the right direction, but should try to allow them to develop the list on their own)
- Show (powerpoint, poster, etc) and briefly explain the 10 ES. (as the things a health department should do to accomplish the core functions of public health)
- Match up what students listed initially to the actual list of 10 ES. (doing this visually on a projected screen, board, or poster paper would be best)
- Discuss discrepancies between the two lists (both the extra tasks students listed and any of the 10 ES they missed).
- Give more thorough background on 10 ES
- Direct students to notice how the 10 ES are incorporated into everyday tasks and scenarios they will encounter in the field of environmental public health.. Give an example.

Or

Example Exercise #2 for introducing the 10 ES:

- List and introduce the 10 ES (what they are, where they came from, why they matter) using powerpoint, a board, or poster paper
- Break the class into 10 teams and assign each team one of the 10 ES (or 5 teams and each get 2 ES)
- Give each team a couple minutes to discuss their ES (what it entails, when it is used, etc.)
- Introduce a relatively simple scenario that EPH professionals commonly face, such as a report from a community member of a regulation violation, or a new requirement from the state.
- Ask students, how does or could your one of the 10 ES apply to this scenario?

-Allow all groups the opportunity to discuss their ES.

Tips about incorporating 10ES in various classes:

While with some of the 10 ES it is fairly obvious how it fits to teach it as a part of a subject-specific course, with a little maneuvering, others can be incorporated as well.

For example, "monitoring," "diagnosing," and "enforcing" are perhaps the most obvious of the 10 ES to bring up in many EPH courses. With a little clarification, instructors could also bring up "inform," "mobilize," "policies," "link," and "evaluate" without going out of the bounds of the subject matter.

1. Introduce/ remind students of the 10 ES at the beginning of a course.
2. Include in class lesson plans questions such as, "Which of the 10 ES are we using or learning about here?"
3. Include in any learning activity that includes scenarios or case studies the question, "What ES did they use?" or "Where there any of the 10 ES that could have been performed in this case but were not?"
4. When you introduce a new topic, ask the students, "What of the 10 ES are integral to this topic?" You could ask the question both to start out the topic and/ or when you are closing the topic.
5. Specifically consider incorporating the 10 ES into the following courses:

- Environmental Health Management
- Public Health Administration
- Community Health
- Risk Assessment
- Environmental Health Policy
- Environmental Health Law
- Principles of Public Health
- Program Planning
- Capstone

Tips from a Colleague

From Alice L. Anderson, Eastern Carolina University

"In my Environmental Health Management and Law class, I review general government organization first. I introduce the idea of public

service and responsibility to the public served, and show how public health services and environmental health essential services are related.

"Then I have them [students] memorize the 10 essential services with a quiz the following class period. After the quiz I have the students make a large pie shaped poster with all the service pieces each made by 1 student or a team of two. In order to get this project coordinated and done in 1 hour, they have to practice some leadership skills and teamwork, which is the next thing on the curriculum.

"For each of the other topics in class, I begin with which essential service is involved. Activities related to writing reports, educating the public, etc. are done, and each is related back to the chart on the wall. For the final writing project, which is the APA style term paper, I ask the students to state and explain which of the 10 essential services are involved in the topic they write about."

From Ton Turco at Boise State University

"In my Community and Environmental Health course I spend one session going over the 10 ES. I will have group projects in the class this year and will try to incorporate 10ES into the projects.

"I also teach a Public Health Administration course. I am in the process of restructuring the course around the 10 ES. I taught the course last year and just felt that it was a series of disjointed facts. I really believe that to present the material in the context of the 10 ES will allow me to develop a cohesive program that shows the connectivity between the various "programs" one sees in the public health arena. My goal is to teach the course using the 10ES as my outline and the lectures and guest lecturers will reinforce the 10 ES.

"It will be my intent to have both classes do the Essential Services of Environmental Health CD ROM. I believe it is helpful for those not in Environmental Health to get a feel for what we go through and therefore it is a very worthwhile exercise for them to go through the 10 ES Environmental Health modules."