**Program Planning and Evaluation**

CASE STUDY: “Health Programs for Colorado River Rafters”

Background:

During July, 1994, at least 108 persons who rafted the Colorado River in the Grand Canyon became ill from an unknown etiological agent. Those affected included professional guides and passengers from 13 of the 17 licensed rafting companies operating in the Park. Their symptoms which lasted up to four days, included nausea, vomiting, and diarrhea. The cause of their illnesses could not be determined because there was no existing program to monitor water quality on the river. This episode was preceded by two outbreaks of Shigellosis that involved over one hundred rafters in the 1970s. Following its investigations of these earlier outbreaks, the CDC attributed the illnesses to poor hygiene practices among river guides.

Despite this history state, federal, and local agencies that share responsibilities in the Park were unable to create a comprehensive health program for the river guides. Finally, at the request of the Park Service, the Coconino County Department of Health Services (CCDHS) accepted the challenge for program development in the fall of 1994.

CCDHS staff began by riding along on several raft tours to observe and experience the unique challenges of this rugged environment, where temperatures often reach triple digits. Staff found that since there is no approved source for drinking water in the canyon, guides purified water using a variety of methods. At that time, none of the equipment in use had been field tested for durability or efficacy. The issue of waterborne pathogens is especially critical for immune compromised passengers. Besides operating the boards and purifying the drinking water, the river guides prepared all meals for their guests. They received no training in food handling practices, food borne diseases, or basic sanitation procedures, relying instead on outdated, and often inappropriate, Park Service regulations.

The final area of concern involved the handling of human waste. The guide’s daily routine included setting up and cleaning portable toilets, tearing them down and loading them on the rafts, and storing, transporting and disposing of fecal matter. The risks to the guides and their passengers on the river were obvious. This exposure extended to the warehouses where the outfitters stored food, and in some cases, disposed of the waste. Although food was stored and prepared in these warehouses, they had never been inspected and there was no regulatory effort to ensure that the waste was properly handled.

Armed with a better understanding of the problems involved, The Coconino County Department of Health Services set out to create a comprehensive, appropriate program tailored to an unusual set of circumstances.

Assignment:

In addition to working on your group project, please prepare a brief paper that discuss this case in terms of program planning and how things like the Essential Services of Environmental Health and the Core EH Competencies could inform your planning effort. Specifically, address the following.

What’s the Problem?

* Why is it the problem?
* Did you ask “why?” 3 times?
* What did you start out with?

What’s Your Goal for resolving this problem?

* How will you know when you have accomplished it?

What objectives might you set to help you reach your goal?

* Set at least three

For each objective identify the method, i.e.,

* Activities needed to achieve the objective
* Resources needed to perform the activities

Evaluation

* How will you know your plan has been successful?