

Using Environmental Health Professionals (EHPs) in Community and Emergency Response Planning

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Problem Statement:

Why is input from environmental health professionals (EHPs) not considered when communities plan for disaster preparedness, emergency response, and proactive code development?

ABSTRACT: Unsanitary conditions and potential disease outbreaks related to inadequate community and emergency response planning have occurred throughout time. As communities experience different stresses, they recover and adapt to varying degrees or they cease to exist. Knowing what happened in the past allows for a potentially healthier and safer future. This project focuses on promoting awareness among local governmental officials related to the value and usefulness of environmental health professionals (EHPs). By incorporating EHPs in community and emergency response planning, a community can avoid problems and increase its chances of a healthier recovery and mitigate negative health exposures.

Currently, many rural Kansas county governments ignore or unaware of environmental health needs, or assign ill-trained staff to these duties. This is related to several factors, among which are limited financial and personnel resources. However, the over-arching reason is the lack of understanding by these officials of the importance to a community's environmental health that a trained and empowered EHP brings. County commissioners need to understand that the training and knowledge of an EHP can make a difference in the quality of health and life of their citizens. Also, EHPs in rural settings tend to be directed to code enforcement duties, but not incorporated in general community planning, which is an under-utilization of these professionals.

The question remains, how can these officials be awakened to the EHPs' appropriate place and usefulness in his or her county/city? The archetype "Shifting the Burden" illustrates the existing situation and why it is perpetuated.

Causal Loop Diagrams and applicable archetypes:
Shifting the Burden

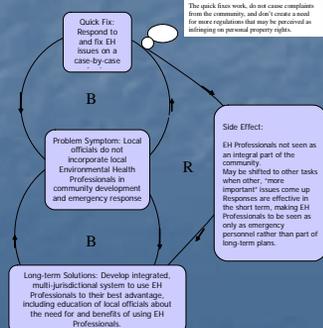


Figure 2. Shifting the burden archetype, illustrating causes and solutions.

As indicated in Ian Mitroff's *Crisis Leadership*, "If we are to redesign our institutions so that we will have a much greater chance of anticipating and preparing for future crises, then we have to alter fundamentally the ways in which we think about critical issues."

The graph below describes desired inputs and their results over time.

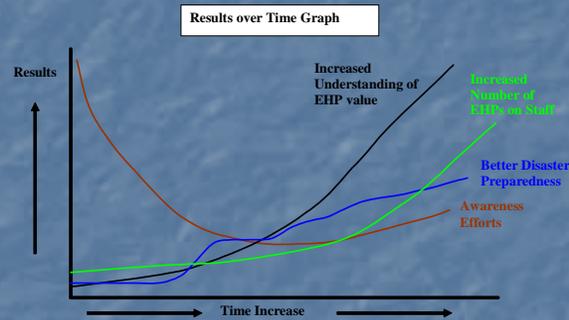


Figure 1. Results over time graph that indicates the changes in factors that effect the results of increased number of EHPs



Tornado aftermath, Greensburg KS

Disease outbreaks can occur, sometimes as the result of unknowing exposures in the individual's environment. Physiological conditions associated with exposure to lead, mercury, volatile organic compounds, are examples of unknowing exposures. In addition, microbiological exposures to bacteria, fungi, and parasites are associated with various illnesses. The identification of environmental exposures is important in the process of restoring health and preventing future related illnesses. Environmental Health Professionals (EHPs) are trained investigators who work to identify exposures related to environmental conditions.

By promoting awareness among citizens and local governmental officials about the knowledge and usefulness of environmental health professionals (EHPs), they become a true resource for individuals and the community at large. Furthermore the incorporation of EHPs in community and emergency response planning, has benefit to a community by avoiding problems and increasing its chances of a healthier recovery.

Investigations by EHPs are based on scientific knowledge and strategies. The results enable identification of negative health exposures and subsequent mitigation.

Poor indoor air quality - Radon causes lung cancer



Poor private well construction



Lead paint remediation



Education and experience are the means to improved understanding. Three steps are proposed:

- A survey directed to County Commissioners will assess their knowledge of environmental health in their county
- A collection of stories telling of actual health problems related to environmental exposures in Kansas will enable local officials to understand the range of knowledge and skills an Environmental Health Professional brings to their constituents
- A follow-up survey of the same Commissioners will assess any change in their understanding

In addition, collaboration with other public health associations and organizations to promote the story collection and to encourage local officials to take steps to incorporate EHPs in community response and planning efforts.