Chapter 38
Hotline for Exposure to Occupational Hazards

Ken Bleakley
CEO, FONEMED, USA

ABSTRACT

Health care providers, first responders and law enforcement professionals face serious safety issues when they find themselves exposed to health-threatening incidents on the job. Rapid, reliable and documented guidance by specially-trained medical personnel is essential to the safety of the exposed person and their contacts. Florida Hospital Centra Care and FONEMED, an accredited medical call center, offer a 24X7 hotline to provide counseling to employees who sustain an occupational exposure. Paper - based systems proved inadequate to handle sophisticated protocols using the compliance guidelines of the U.S. Department of Health & Human Services and Centers for Disease Control. Therefore, they developed advanced information technology for registered nurses to process the protocols, obtain source information, fully document all calls and transmit the reports immediately to the treating health care provider and other concerned parties. Nurses also have immediate access to advice from on-call occupational medicine physicians for unusual environmental exposures, pandemics such as H1N1 Flu, or bioterrorism issues. The Exposure Hotline has since become the backbone of a Swine Flu Hotline now serving the general public

INFORMATION TECHNOLOGY AND OCCUPATIONAL EXPOSURES

Health care providers, first responders and law enforcement professionals face serious safety issues when they find themselves exposed to health-threatening incidents on the job. Rapid, reliable and documented guidance by specially-trained medical personnel is essential to the safety of the exposed person and, frequently, others with whom he or she is in contact. Waiting or ad hoc advice is not an option.

Occupational exposures within the healthcare setting are usually found in three categories:

1. Exposure to blood or body fluids (BBFE)
2. Exposure to communicable diseases
3. Exposure to unusual substances

Traditionally, at-risk workers at have relied on a wallet card or other guidance when confronted with an occupational exposure that generally advised them to take some or all of the following measures:

*   Report the incident to a supervisor
*   Visit the company health unit and pick up a kit
*   Go to the Emergency Room

Information technology simply did not play a role in responding systematically to the urgent needs of an exposed worker.

The Medical staff of Adventist Hospital Systems began to address the potential for healthcare workers to be exposed to blood-borne pathogens that cause chronic disease or terminal illness, such as Hepatitis B & C or HIV/AIDS in the early 1980s. Subsequently, the System's Occupational Medicine Division of Centra Care took responsibility for an Exposure Hotline to provide assessment for blood & body fluid exposures (BBFE) to multiple levels of first responders and law enforcement, as well as to Florida Hospital employees. The Exposure Hotline has grown to include city and county municipalities, other hospitals, correctional institutions, long-term-care facilities, drug rehab centers, free-standing surgical centers and physician and dental offices.

As the size and sophistication of the program grew it became apparent that paper-based systems could not keep up with the demand for services and associated medical advances. CentraCare asked FONEMED to provide a 24/7 call center staffed with Registered Nurses who are specially trained to: take the calls. Together CentraCare and FONEMED developed pioneering information technology to assist the nurse to evaluate the exposure utilizing CDC protocols on computer applications; advise the patient; and document the incident.

This Chapter seeks to demonstrate that:

*   There is a great need for rapid response and guidance for occupational exposure to life threatening and communicable substances.
*   The need is not being met by current ad hoc responses to exposures.
*   E-Health provides a systematic means of supporting trained medical personnel to apply best-practice guidelines and to document sources of exposure, laboratory tests and results, courses of treatment and outcomes.
*   E-Health technology also provides the means to aggregate data from callers in order to aid public health authorities in determining patterns of exposure as well as being able to use it as a surveillance tool for pandemics and bio-terrorism.
*   E-Health makes this model suitable for national and international deployment and for application to other health related issues such as chronic pain management.

A NATIONAL PROBLEM THAT NEEDS TO BECOME A NATIONAL CONCERN

There are few reliable statistics, but some estimates, as to how many health workers are exposed to the dangers enumerated below or what percentage of them report the incident or seek any form of intervention. Protocols vary widely and generally require the affected individual to take the initiative in seeking medical attention and reporting the event.

Occupational exposures emanate from a broad spectrum of sources. The US Department of Health and Human Services, Agency for Healthcare Research and Quality has prepared comprehensive

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