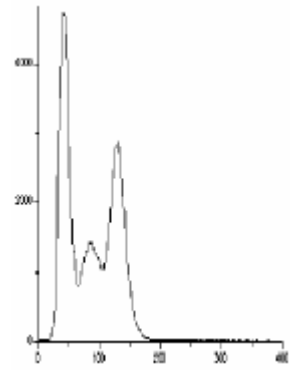




**MIDWEST
CHAPTER**

THE SPECTRUM

**NEWSLETTER OF THE HEALTH PHYSICS
SOCIETY'S
MIDWEST CHAPTER
April 25, 2007
www.midwesthps.org**



Annual Meeting, May 22, 2007

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Canberra
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Medical Response to Radiation Incidents

Guest Speaker:

Kevin L. Nelson, Ph.D.

President-Elect, Health Physics Society

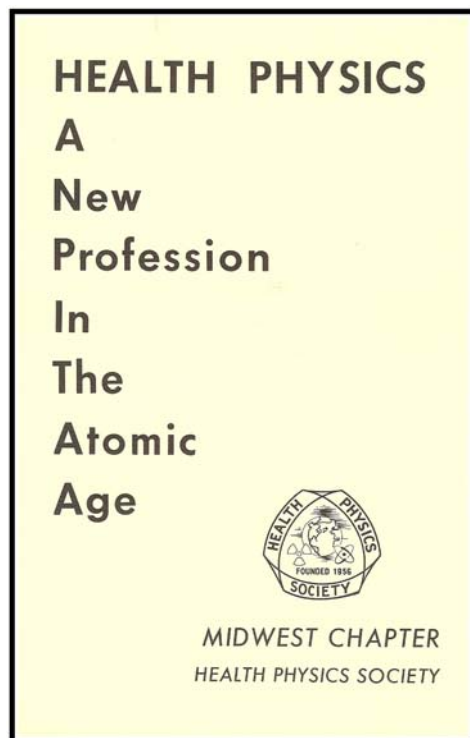


Dr. Nelson's presentation will highlight steps healthcare organizations should take in the event of a radiation incident. Issues discussed will include the importance of having a workable radiation response plan, ensuring the healthcare response plan is integrated with the county plan, stressing the importance of linking trauma and radiation risk triage strategies and encouraging the immediate treatment of critically injured casualties irrespective of contamination levels. The target audience includes radiation protection professionals, emergency department staff, decontamination team members, emergency management managers and healthcare facility administrators.

For the past 11 years, Dr. Nelson has been the Radiation Safety Officer and Director of Environmental Health & Occupational Safety at Mayo Clinic in Jacksonville, Florida. His previous health physics experience includes working at the University of Minnesota for 10 years, 3M Company for 4 years, Brookhaven National Laboratory for 2 years and acting as a consultant for the Minnesota Dept of Health Bureau of Radiation Control for 10 years.

A Chapter Pamphlet Is a Part of History

Kit Weaver, Chapter Historian



One of the Midwest Chapter's most significant contributions to the profession of health physics is a pamphlet called, "Health Physics – A New Profession in the Atomic Age." The 15 page pamphlet was developed, printed, and distributed by the Midwest Chapter HPS throughout the United States, primarily due to the efforts of Chapter members Robert Wynveen, Tom Steele, and Carroll Hampleman.

As stated in the Introduction, "This pamphlet was prepared to describe the nature and potential of a career in Health Physics, and to encourage young scientists to enter the field." The pamphlet succinctly answers basic questions like:

- What is health physics?
- What do health physicists do?
- What is their income?
- What of the future?
- What universities offer programs in health physics?

Originally distributed in 1965, the brochure was widely sought after and was printed five times with a total distribution of around 11,000 copies by the end of 1969.

A revised edition was completed in 1973 for use by the national Health Physics Society and was renamed "Health Physics – A New Profession for the Nuclear Age." The Chapter supported further revisions to the pamphlet in 1978 and 1986.

With the advent of the Internet, the need for hardcopy brochures has become less important. However, the basic structure and content of the original brochure remains intact as part of a webpage of the Health Physics Society, entitled "Careers in Health Physics," and located at <http://hps.org/publicinformation/hpcareers.html>. At the end of webpage is the following statement, "Most of the information on this page was prepared by the Alabama Health Physics Society, with appreciation extended to the Midwest Chapter of the Health Physics Society..."

From the President's Desk

As my term comes to a close, I want to thank all those who attended the fascinating technical meetings and especially those who volunteered to run for elected office. The ballots should be sent out this week and, as usual, the candidates are running unopposed. As you hear every year, please don't refrain from voting just because there appears to be no competition. We need the votes to show the new officers were actually approved by the membership and not by some board members trading favors in a dark room. The early date for the annual meeting makes it even more important to vote early. Voting must last no less than 20 days and the annual meeting at which the certified results are announced is scheduled for May 22. You do the math.

Bruce J. Sanza, CHP

LEGISLATIVE AND REGULATORY NEWS

Submitted by Darrel Wiedeman

IONIZING RADIATION WARNING SYMBOL

On March 1, 2007, the NRC issued regulatory issue summary (RIS) 2007-03 to inform addressees that on February 15, 2007, the International Organization for Standardization (ISO) released ISO Standard #21482, *Ionizing Radiation Warning - Supplementary Symbol*, which describes a new supplemental symbol to warn individuals not trained in radiation safety of the presence of a large source of ionizing radiation. The ISO supplemental symbol does not replace the standard radiation symbol (trefoil). The information in ISO Standard #21482 and this RIS are not new NRC requirements; therefore, no specific action or written response is required.

BACKGROUND

At the December 2000, *International Conference of National Regulatory Authorities with Competence in the Safety of Radiation Sources and the Security of Radioactive Materials*, participants discussed concerns about the increasing number of radiation events involving the International Atomic Energy Agency (IAEA) Category 1 and 2 sources (later expanded to Category 3 sources) that caused death or serious injury. Conference attendees concluded that the trefoil had no inherent meaning to individuals, such as children, who had not been trained in radiation safety. As a result, the conference recommended that a universal system of labeling large radioactive sources be developed, as a supplement to the trefoil, that would target any citizen, anywhere in the world with the message: "This object is dangerous and should be left alone," as well as to convey without words that one needs to "Run Away".

On September 10, 2001, the IAEA General Conference approved the development by ISO of a new standard specifying the supplementary warning symbol. In 2005, IAEA designed a number of symbols with different colors and shapes and evaluated them in a series of assessments and comparisons with over 1600 people having insufficient technical education or background, children, and different cultures in 11 different countries (including the United States) to narrow down the choice.

In July 2006, the ISO Secretary reported that 14 countries (including the United States) approved the standard, three countries approved with comments, two countries abstained, and two countries disapproved. NRC did not represent the United States on this matter but has followed the development of the supplemental symbol. NRC has not initiated rulemaking, nor does it intend to at this time, to address this matter and there are no new requirements for licensees.

SUMMARY OF ISSUE

The new supplemental symbol is shown below. As discussed in ISO Standard #21482, IAEA recommends that the supplemental symbol be used for IAEA Category 1, 2, and 3 sealed sources. This symbol would supplement the trefoil, not replace it. As suggested, the supplemental symbol should be placed in close proximity to the source preferably on the shield or near the point of potential access to the source. The intent of the symbol on the shield is to convey the message that dismantling the device is very dangerous.

Due to the small size of most sources, placing the symbol directly on the source might not be practicable. Placing the symbol on the device shielding so it can be seen prior to accessing the actual source is desirable. The supplemental symbol shall be closely associated with the device housing the source, as a warning not to dismantle the device or get any closer to the source.

ISO Standard #21482 recommends, when practical, that the supplemental symbol be located directly on the source shield and under the device covers, such that it is not visible during normal use but would be visible if anyone attempts to dismantle the device. If there is no device cover, the Standard suggests that the symbol should be located on the outside housing in a discrete location, clearly visible prior to disassembly, but not visible during normal use. The supplemental symbol should not be used on a door to a room or in public areas, or on trucks or shipping containers.

IAEA also intends to inform scrap yards, smelting operations, or places where radioactive material is not intended to be located aware of the supplementary symbol's use. IAEA also plans to hold a workshop later this year to work on implementation strategies for how best to retrofit the symbol on existing applicable sources. Some licensees that export sources to countries that require this supplemental symbol may need to use the supplemental symbol, even though NRC does not require licensees to do so.

ISO published and released this standard on February 15, 2007. IAEA and ISO both made media announcements about the publication of the new standard. IAEA has gained agreement from most source manufacturers to start using the symbol on new IAEA Category 1, 2, and 3 sources as soon as possible. There is no requirement for NRC or Agreement State licensees to adopt ISO Standard #21482.



**Midwest Chapter Health Physics Society
P.O. Box 513
Westmont, Illinois 60559**

Annual Meeting Medical Response to Radiation Incidents Speaker: Kevin L. Nelson, President-Elect, Health Physics Society	
<p>Date: Tuesday, May 22, 2007</p> <p>Time: 6:00 PM Social Hour 7:00 PM Dinner 8:00 PM Featured Speaker</p> <p>Location: Greek Islands Restaurant 300 East 22nd Street Lombard, IL 60148 630-932-4545</p> <p>Cost: \$22 per person (member and spouse) \$25 per person (others)</p>	<p style="text-align: center;">Menu</p> <p>Complete dinner (soup, salad and dessert) with following choice of entrée:</p> <p>Chicken Riganati (quarter piece of chicken baked Greek style with olive oil, herbs and spices)</p> <p>Keftedes (Beef and lamb meatballs stewed in tomato sauce)</p> <p>Vegetarian Mousaka (Baked eggplant, zucchini and potato casserole topped with béchamel sauce)</p> <p>Each entrée will be served with rice and potato.</p> <p><i>Please specify your choice of entrée when you make your reservation.</i></p>
<p>Reservations: Phone or e-mail your reservation <u>and entrée choice</u> to Gerald Davidson, our Program Chair, at 630-252-8894 or gdauidson@anl.gov by 4 pm MONDAY, May 21.</p>	