Monday, 1 February
CEL #1
Elements of Credibility for Professional Health Physicists
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Director, Radiation Safety Counseling Institute

As professionals in radiation safety perhaps one of our most cherished attributes is our credibility. But, what is credibility? Is it trustworthiness, honesty, truthfulness, faithfulness, admiration from others, reliability, dependability, integrity, reputation, status, or believability? Our credibility probably has all of these elements and more. Our peers may judge our credibility according to how we are introduced as a speaker. Introductions often include information on our employment, service to the profession, college degrees, publications and awards, etc. The chances are that we have devoted a large part of our career to developing our technical expertise and credentials for credibility. While such efforts may establish credibility with our peers, how credible are we with members of the public, especially those who have concerns for radiation safety or health effects? Will technical or professional credentials suffice for public credibility? Despite many years of education and professional experience, many health physicists are challenged about how to achieve credibility with the general public. Our best efforts to convey the "truth" about radiation safety (as we understand it) have apparently not changed the public's sentiments about radiation. Generally members of the public would seem to be as concerned and afraid of radiation today as they were after the bombs in Japan. If we are telling the "truth" why aren't we believed? One of the elements for public credibility may be how well we can accept the public's dismay and fears about radiation. This can be especially difficult when their fears do not seem to have a rational technical basis. Perhaps it would be helpful to remind ourselves that the public may not care how much we know, until they know how much we care. Do we care? Yes, deeply, but how will others know? We might begin by letting people know that it's OK to be afraid of radiation. While technical expertise is crucial for credibility, so also may be our ability to identify with public fears. Some of the tools for achieving public credibility could include active listening (hearing and reflecting feelings), asking questions (rather than giving answers), providing opportunities for people to answer their own questions, and giving non-defensive responses. These and other options will be explored. This lecture will also look at how people determine truth and judge credibility.

Tuesday, 2 February

CEL #2

The Other A-Team: The Advisory Team for the Environment, Food and Health

Michael Noska

Food and Drug Administration, USPHS

The Advisory Team for the Environment, Food and Health is a federal interagency group of health physicists and other radiological health experts whose mission is to provide protective action recommendations to decision makers (Federal, State, local, tribal and territorial officials) following radiological or nuclear emergencies. The Advisory Team is comprised of representatives from four agencies: EPA, USDA, CDC and FDA. A major function of the Advisory Team is to interpret published guidance on radiation protection, known as Protective Action Guides or PAGs, in the context of the specific contamination or exposure scenario. These guidance documents include protective action guides from the EPA for the general public and emergency workers; guidance from the FDA on acceptable levels of contamination in food and animal feed; guidance from the FDA on the use of potassium iodide (KI) for the protection of the thyroid following releases of radioactive iodine, and; guidance from the Department of Homeland Security on long term recovery following incidents involving radiological dispersal devices (RDDs) or improvised nuclear devices (INDs). This presentation will include a discussion of the Advisory Team's mission and method of operations, including its integration into the Incident Command System and NIMS. The speaker will also discuss the resources that the Advisory Team can bring to bear in a radiological or nuclear emergency.

Wednesday, 3 February
CEL #3
Radiation Safety Program Management of a Special Nuclear Materials License
Tom O'Brien
The National Institute of Standards and Technology (NIST) conducts its mission, in part, under a Special Nuclear Materials license (10 CFR 70) and an Exempt Distribution license (10 CFR 32) issued by the Nuclear Regulatory Commission. NIST is also subject to 10 CFR 30, 36, 37, 40, 73 and 74. The framework and implementation of the NIST Radiation Safety Program will be presented. The challenges and successes of the program will be discussed.

CEL #4
PAG Manual for Interim Use
Sara DeCair and Ed Tupin

In 2013, the U.S. Environmental Protection Agency (EPA) proposed an update to the 1992 Protective Action Guides (PAG) Manual. The PAG Manual provides guidance to state and local officials planning for radiological emergencies. EPA requested public comment on the proposed revisions, while making them available for interim use by officials faced with an emergency situation. Developed with interagency partners, EPA's proposal incorporates newer dosimetric methods, identifies tools and guidelines developed since the current document was issued, and extends the scope of the PAGs to all significant radiological incidents, including radiological dispersal devices or improvised nuclear devices. EPA also requested input on potential protective action guides for drinking water. New in the PAG Manual is planning guidance for the late phase of an incident, after the situation is stabilized and efforts turn toward recovery. Because the late phase can take years to complete, decision makers are faced with managing public exposures in areas not fully remediated. The proposal includes quick reference operational guidelines to inform re-entry to the contaminated zone. Broad guidance on approaches to wide-area cleanup and developing cleanup goals is also provided. EPA adapted the cleanup process from the 2008 Department of Homeland Security (DHS) "Planning Guidance for Protection and Recovery Following Radiological Dispersal Device (RDD) and Improvised Nuclear Device (IND) Incidents" and the final PAG Manual will supersede that DHS guidance. Waste management guidance is also provided. Recognizing that an incident could result in radioactive waste volumes that severely strain or exceed available resources and capacity, officials may consider alternatives for disposal of waste that is relatively lightly contaminated. Waste management, which includes treatment, staging, and interim and long-term storage, must be an integral part of recovery.