

# Radiation Safety Counseling News

September 16, 2016

## Telling the Truth and Possible Answers for Risk Communication

January 31, 2016

My studies with the Myers Briggs Type Indicator (MBTI - a trademark of Consulting Psychologists Press) for over 4,000 specialists in radiation safety show that, for most HPs, truth is what can be defended by logical analysis based on fundamental laws and principles and corroborated by peers according to the scientific method for determining the technical truth. However, for much of the general public, truth is determined by what is best for people, taking into account the circumstances, feelings, empathy, values, appreciation, and caring. These two approaches to determining the truth may lead to very different conclusions. While these two views of the truth can be poles apart, both groups will honestly believe they are right and will swear they are telling the truth in a courtroom.

### What is Truth to an HP ?

- Truth is what can be defended by logical analysis
  - Based on fundamental laws, principles
  - Peer corroboration by the scientific method
- HPs will believe they can defend what is "true"

The question to consider today is whether telling the "technical" truth about radiation is working? Have public sentiments against radiation mellowed over the decades since the advent of nuclear weapons? I believe most will agree that the public is as concerned about radiation safety today as they were decades ago. After all we now have proof that nuclear technology can go wrong (Three Mile Island, Chernobyl, and now Fukushima Dai-ichi). Apparently the truth we are telling people about radiation risks is not generally accepted. This begs the question, "How do people determine the truth?" Insights on this question have been presented in a series of HPS Newsletter articles in 2012-2013.

I have attempted to describe how people make decisions on truth for radiation safety based on processing information as normal functions of the subconscious mind. Our subconscious mind is wired to constantly search for signs of danger. However, since radiation does not give us any physical sensation, we have to rely on imagination to determine our safety. Our subconscious mind has been programmed by education and the media to automatically associate all radiation with "Deadly Radiation." Thus, the associations by normal subconscious functions for safety will likely lead to decisions based on images of unacceptable consequences of radiation exposures. This class will explore many questions on effective risk communications, such as: What is the truth? How does truth relate to beliefs, faith, and ethics? What is lying? How do we process data to determine the truth? How does randomness affect decisions for safety? How does radiation mythology affect people's views. And, what are possible answers to effective radiation risk communication?

A copy of Ray's presentation handout for this two-hour Professional Enrichment Program presentation is available on his website at <http://radiationcounseling.org/docs/TruthPEP2016.pdf>

## Elements of Credibility for Professional Health Physicists

February 1, 2016

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?

### Why is Credibility Important ?

- **Determines our status in the community**
  - We depend on community for survival
- **Determines our livelihood**
  - We are employed according to our credentials
- **New opportunities depend on credibility**
- **Our legacy is related to credibility**
- **Our relationships depend on credibility**
- **Our reputation depends on 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.

A copy of Ray's presentation handout for this one-hour Continuing Education Lecture is available on his website at <http://radiationcounseling.org/docs/Credibility2016.pdf>

Ray Johnson  
301.370.8573  
ray@radiationcounseling.org

*Send me an email today!*

Providing accurate and unbiased  
information regarding radiation safety

STAY CONNECTED

