Dear Reader,

The most difficult part of the job for many in radiation safety is dealing with people. I respond to more questions about this subject each year. Following is an essay on an issue commonly experienced by many in radiation safety.

As always, your questions or feedback are welcomed. Feel free to contact us through email, our blog, or our Facebook page.

Regards,
Ray Johnson

What Can You Do, When You Are Not Believed?

How do you respond when someone says, “I do not believe what you are telling me!” Do you get defensive and try harder to justify yourself? Do you find yourself getting frustrated, upset, and angry because you believe the other person is wrong?

Reasons for Not Believing

There are many reasons why someone may not believe you, including the possibility that your information is not correct. Assuming you have done your homework well and your information is technically defensible among scientific peers, then the source of unbelief has to come from the other person's perspective, views, knowledge, beliefs, and perhaps their agenda. Some examples might illustrate these possibilities.

When I was presenting a class on possible health effects from naturally occurring radioactive material at an industrial facility, a worker in the back of a room of 50 loudly proclaimed that he did not believe what I was saying. His basis was that my comments did not match up with what he found by researching the Internet (for more information on this topic, see my presentation Case Studies in Radiation Risk Communications). Last summer I presented a paper on Fukushima radiation fears (Japan Nuclear Fears - Real and Perceived Dangers) at the annual meeting of the American Industrial Hygiene Association. In the written comments someone said it would have been a better session without my propaganda.

We are on

We have created a Facebook page for the Radiation Safety Counseling Institute. This is another resource for the sharing of radiation safety related information and questions.

Quick Links

Website
Forum/Blog
Facebook

Got Questions?

If you have a question about radiation safety that you would like to share, please post your question on our Forum (blog) or our Facebook page. Each week our experts will select a question and post an answer that will also be included in our monthly newsletter.

To post a question go to: Radiation Safety Forum or RSCI on Facebook

http://campaign.r20.constantcontact.com/rend...SnN1w67kvug7XwqVpr5pZV1QKrpaAeitmwo_8BbUA%3D (1 of 3) [11/17/2011 3:35:24 PM]
The Big Challenge is to Stay Non-defensive

You may have great difficulty in staying non-defensive when your credibility (honesty, integrity, knowledge, or professionalism) is challenged, especially if you feel your information is technically defensible and justified by the circumstances. If you find yourself speaking louder, interrupting the other person, arguing your case, or telling the other person they are wrong, then you are being defensive. Getting defensive is a natural response to challenges and not necessarily wrong. The question is whether your defensiveness gets in the way of your goal for the communication. One way to stay non-defensive is to use **Active Listening** (Thomas Gordon, 2001). This approach does not respond with anger, criticism, facts, questions, or interpretation. Instead, with **Active Listening** you respond with a short paraphrase of the other person's message and reflect the feeling as you understand it. You do not inject anything of yourself in your response. You let the other person correct your response until they are satisfied that you have heard his/her feelings. Therefore, you do not have to get the content or feeling 100% right the first time around. For more information on **Active Listening** I have included the following link to a one-hour class, **The Most Powerful Tool for Effective Risk Communication - Active Listening**, which I presented to the Health Physics Society at the 2008 annual meeting.

To see how **Active Listening** might work, in response to the worker at the industrial facility, I said, “You are upset because you found different information on the Internet and I may not be telling you the truth? “Yes, EPA and OSHA are giving different information on radiation risks.” “You feel better about what EPA and OSHA are saying rather than what I am saying.” “Yes, government agencies are more reliable.” “So, you do not feel comfortable with my information.” At this point the worker has heard his feelings and views reflected without any judgment or criticism. He has not been told that his views are wrong. If you can stay non-defensive in the **Active Listening** mode and the worker keeps on challenging or criticizing you, you may also find the audience coming to your defense. This is what actually happened. If the audience had not intervened, I would have asked the worker if he would like to know more about the basis for my conclusions. If he agrees, he then moves from an emotional reaction to a rational problem-solving mode.

How to Answer Concerns for Safety

There is a process for answering questions on radiation safety which professionals would use for determining risks. I call this process **the steps from cause to effect**, as follows:

1. What are the properties of the radiation (alpha, beta, gamma, x-ray, neutrons)?
   - What is the quantity and form of the radioactive material (solid, liquid, gas, sealed, or unsealed)?
2. Where is source of radiation located (relative to where people may be located, because distance makes a great difference on the strength of an exposure)?
3. How is it contained? Is the material in a container and what will happen if the container is broken?
4. How will it move in the environment? Will the material spread on the ground as a liquid or powder, or could it be carried through the air?
5. What are the exposure conditions? Could you be exposed to gamma rays from outside of your body or from materials inhaled or ingested?
6. How much radiation energy is deposited in body (radiation dose)? The amount and location of radiation energy in the body is the most important data for determining radiation risks.
7. What is the health risk? After determining the radiation dose, we can say something about risks by looking at what we know about people who have been exposed and we know the consequences (primarily based on observations of survivors of Hiroshima and Nagasaki).

If we leave out any of these steps (especially step 6), we cannot draw any rational conclusions about radiation safety. Without going through these steps, conclusions on safety can only come from a gut reaction of the subconscious mind which is fearful of radiation (see the September 2011 Newsletter, Radiation Fears and the Subconscious Mind). Unfortunately, the media and many people instinctively go from step 1 (radiation is present) to step 7 (the risks are unacceptable) without considering the most important steps in between. I like to invite concerned people to go through the steps from cause to effect to counsel them on how to find their own answers to questions on radiation safety (rather than my answer or the answers they may find on the Internet).

I usually conclude the process by offering a statement which most people have never heard. Namely, it is actually very difficult to seriously harm someone with radiation. More than a dozen past presidents of the Health Physics Society have given their agreement with this message. The basis for this statement has to do with the enormous amounts of radiation needed to kill cancer cells (which are more sensitive to harm by radiation than normal cells). Medical doctors know that it takes an incredibly large dose of radiation to kill sensitive cancer cells. Our bodies are actually very resistant to damage by radiation. Where people have died from radiation exposure the conditions were very severe, such as the case for first responders to the Chernobyl reactor fire. In contrast, no one has died from radiation exposures from the Fukushima reactors.

How to Respond to Expressions of Unbelief

In summary, I suggest the first challenge is to stay non-defensive. Defensive can be recognized when you find yourself raising your voice and arguing your point. A non-defensive response is to use Active Listening as described by Dr. Thomas Gordon. This is a process which paraphrases the content of a message and the associated feeling, without judgment, criticism, or opinion. When the other person is satisfied that you have heard his/her feelings, you can then invite them to resolve their questions about radiation risks by the leading them through the steps from cause to effect.

Reference