

## Whack-a-Mole? Build-a-Reactor? What Game Shall We Play?

By Margaret Harding, Columnist

I suspect everyone with a computer has played at least one game of whack-a-mole. There's a Bin Laden version, a George Bush version, a Bill Clinton version. I'd bet there's a Barack Obama version and a Hillary Clinton version as well. We like hitting things over and over again. Just watch a toddler with a spoon.

Seems like the nuclear industry likes to play whack-a-mole as well. We keep hitting on the issue of the day with whatever material we have handy. Wait for the next thing to pop up and run off to hit it. Round and round we go, until too many moles made it up without getting hit. Then we lose the game.

A few weeks ago, I was asked by my friend Rod Adams to participate in a podcast on his long running **Atomic Insights** blog. This isn't particularly newsworthy, as Rod frequently has me on as a guest. This particular session was unusual in that four of us played interviewers for an expert in **Risk Communication named Peter Sandman**.

I had run across Dr. Sandman's work in doing some research on risk and crisis communications after the Fukushima event as a part of an American Nuclear Society presidential committee on Fukushima. Hearing him live and having a chance to ask a few questions clarified some ideas for me.

Reminder, I am not a professional communicator, although I played one on TV. Nor am I a journalist. I am an engineer by training and preference. I am a business consultant by trade.

One of the key concepts I had gathered from his book that was really hammered home in the podcast was that public outrage and the true hazard are not correlated. For example, many more children die from drowning in a swimming pool than from a gunshot. But many more parents worry about guns than swimming pools. The true correlation is between outrage and PERCEIVED hazard. More importantly, the cause and effect is not what we think it is.

Let's look at the idea that if we simply teach the ignorant public about the real risks, they will be enlightened and nuclear power will win the day. I've been hearing that for at least 35 years, ever since my early days in college.

Yet there is still a vocal group that is completely convinced that nuclear power, more specifically, the radiation created by nuclear power, is deadly dangerous. One slip and one of these plants will kill millions and contaminate hundreds of miles to the point of being uninhabitable.

It turns out the cause and effect connection is the exact opposite of what most of us have been taught. Outrage CAUSES increased perception of hazard. People get upset, THEN decide there's something dangerous going on.

At that point, no amount of teaching, logic, or reasoning will dissuade. If you succeed in tamping down one perceive hazard, the outraged crowd will find another one. Whack a mole time again.

For example, show data that no one will get radiation sickness, then people believe that cancer is the risk. Show data that counters that, then people believe that birth defects are the risk. People who are angry feel lied to, or cheated, or abused. They don't trust the people in the front of the room and don't want to hear their "excuses." They want somebody to "do something."

Unfortunately, NEI likes to prate on about how everything is extremely safe and nothing needs to be done, while at the same time fighting the Nuclear Regulatory Commission tooth and nail, mostly behind the scenes.

Then, when events like Fukushima occur, they point to those NRC mandated updates and pretend it was their idea. This strategy does nothing for the industry. It leaves people suspicious and skeptical about industry motives. It makes our regulator, one of the toughest in the world, look ineffective and weak.

We should acknowledge when the NRC held its ground and mandated changes that, in hindsight, were really a pretty good idea. In doing so, we help the public see our regulator as being quite independent and stringent in its regulation.

Those of us that work in the industry know that the NRC reviews are tough and thorough. We need to make sure the rest of the world knows it too. Giving people confidence in the NRC as an oversight body helps lower distrust and outrage.

THAT, in turn, can lower the general perception of hazard, which might eventually allow more sensible regulation. Instead of whack-a-mole, we can start playing "build-a-reactor," a game I think we'd all much rather be playing. ●