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**To:** [Kathryn Ann](#); [Jama D COL USARMY HQDA DCS G-3-5-7 \(USA\)](#); [Latha](#); [Timothy Taulbee](#); [Adela \(CDC/DDNID/NCEH/DEHSP\)](#)  
**Cc:** [Shaheen A](#); [Angela](#); [Nicole Martinez](#)  
**Subject:** My thoughts on the Env/Rn Section comments on the videos  
**Date:** June 6, 2022 12:03:39 PM

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Dear Kathy and fellow HPS Directors,

I am replying via gmail to avoid any chance that my views will be construed as an official EPA response. I am adding Shaheen, Angela, and Nicole for their awareness. I have already expressed my concerns about the videos, so you all know I wasn't happy with them. After watching most of them, I can say that I heard some interesting allegations about science that took place 50 to almost 100 years ago. Sadly, most of the scientists being maligned are not here to defend themselves, whether or not some (or many?) of the allegations have merit. The larger issue for me is – So what? I have found nothing in these videos that refute the current basis for selecting LNT as the most prudent (or parsimonious) basis for implementing the system of radiation protection. The Japanese Lifespan Study, many recent or ongoing pooled epidemiology studies, newer medical cohort studies (e.g., CT in children), and others (see NCRP Commentary 27) lend valid, peer reviewed support for linearity at cumulative doses down to 100 mSv and there have been some studies (albeit statistically weak) that indicate excess cancer risk at a few 10s of mSv (or mGy). I am personally very encouraged about where new biology research tools may take us in the coming years. But for now, I think you can infer (though I am in no way speaking authoritatively) that regulatory agencies that rely on the LNT model will not be convinced to change that view as a result of the Calabrese videos.

Having said that, I am not in favor of removing the videos from our website. I am in favor of adding a much bolder and unequivocal disclaimer that they are not the official view of the HPS, and I am strongly in favor of adding differing views within a dedicated portion of the HPS website. Let's be honest, the data are still not there to definitively say whether or not LNT is excessively over-protective (or under-protective!) at very low doses. I think HPS needs to guard our credibility before we find ourselves (more?) on the fringe of the global radiation protection community (again, my personal opinion).

Dr. Pamela Sykes has published research showing hormetic effects and she believes that current regulations are too stringent. Nevertheless, she published a paper in Dr. Calabrese's journal, Dose-Response, in April 2020 (<https://doi.org/10.1177%2F1559325820921651>), which concludes:

The pro-LNT/anti-LNT debate has led to much unnecessary division between scientists and regulators. The important question is "Are the public and radiation workers protected using our current radiation limits"? It is very likely that the answer is "Yes." Can the public/workers be protected in a more efficient and sensible manner? The answer is "Yes." The latter question is gradually being addressed based on the graded approach to regulation of radiation. Basically, the current dose limits will not change until it is demonstrated that the regulations are no longer protective of public health and the environment. In the short term, if LNT is left out of the argument, and replaced with suggestions for sensible approaches to improve the ways to reduce financial and administrative burden based on acceptable risk using a graded approach within the current regulatory system, then there will be a clearer path forward toward more sensible regulation of ionizing radiation.

I couldn't have said it better myself!

I am on vacation June 8-22, so I may not be on the Board call this month. If not, I will be in Spokane and hope to see you there.

Best regards,  
Mike