

## The Boice Report #23



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### WARP—Where Are the Radiation Professionals?

The National Council on Radiation Protection and Measurements (NCRP) coined the acronym “WARP” to draw attention to the dwindling number of radiation professionals in the United States. The community of radiation professionals is broad and not easily defined. It includes safety officers, health professionals, emergency responders, utility workers, waste managers, medical users, researchers, educators, government scientists, and regulators. The impending, if not current, crisis in the supply of radiation professionals will worsen as the projected demand continues to increase.

Kathy Pryor has provided two marvelous overviews in *Health Physics News* on the WARP initiative and on the needs of the Health Physics Society ([September 2013](#) and [February 2014](#)). In brief, a WARP workshop was held in July 2013 and attended by 50 senior-level professionals from federal and state agencies (including the Office of Science and Technology Policy), professional societies, universities, and the private sector. Each participant was asked to present a quad chart—one slide that answers four questions: Who We Are (Mission), What We Do, How We Do It, and Our Needs.

The breakout-session reports, abstracts, and presentations form the basis of an NCRP statement titled “Where Are the Radiation Professionals—Today, Tomorrow, and in an Emergency?”, which is undergoing NCRP review now and will be available soon.

Recently, the WARP workshop program, agenda, presentations, abstracts, quad charts, and participant list were made available at [ncrponline.org/PDFs/2013/WARP\\_Workshop\\_Summary.pdf](http://ncrponline.org/PDFs/2013/WARP_Workshop_Summary.pdf).

- NCRP agrees that **now is the time to act** with a coordinated, broad-based, and comprehensive effort to address the dwindling number of radiation professionals and propose realistic and achievable solutions. If not “now,” then when? If not “you,” then who?
- **The serious problem facing our federal government is recognized.** “. . . strategic human capital management has been a pervasive challenge facing the federal government, and has led to government-wide and agency-specific skills gaps . . . federal strategic human capital management was a high risk area because current and emerging mission **critical skills gaps were undermining agencies’ abilities to meet their vital missions.**” ([GAO 2014](#)).
- **Baby boomer retirements** will severely affect the number of radiation professionals available for medicine, nuclear power, national defense, environmental restoration, and emergency response.
- **In an emergency, a surge capacity needs to be developed** through better coordination of federal assets and a national “reserve corps” of [volunteer](#) radiation professionals.
- **Continued data gathering** to monitor supply and demand is needed.
- **Improved coordination** is needed among government, academia, and the private sector to ensure national capability to manage radiological incidents and maintain the radiation sciences enterprise.
- **Increased federal support** of academic education programs and basic research in radiobiology, medical countermeasures, improved detection capability, and nuclear forensics is essential, without which the future will be bleak.
- **Conclusion:** Radiation professionals are needed now to meet the requirements of the nation today and tomorrow. Professionals are needed who understand the evolving science of radiation in the world today, with goals to ensure the safe use of radiation for the health and welfare of the U.S. population and to respond to radiological incidents. Stay tuned for the NCRP statement!