CRCPD Newsbrief

Conference of Radiation Control Program Directors, Inc.
A Partnership Dedicated to Radiation Protection

www.crcpd.org

August 2025

FROM THE CHAIRPERSON

THE "BIG PICTURE"

by Patrick Mulligan

Hello everyone! Seems like I say this every year, either to myself or anyone who will listen, the summer has just flown by again!

As CRCPD Chairperson, I once again have the unique opportunity and privilege to focus on the organization's "big picture." The expansive scope of the work produced by the volunteers among our membership never ceases to impress me. Through the many years that I have had the good fortune to be part of this great organization, I've always understood the important role CRCPD plays as leaders, partners and champions across the entire radiation protection community. With significant changes on the horizon, it is now more important than ever for the CRCPD to continue to be a proactive leader. **With the anticipation of substantial modifications to the regulatory framework at the federal level and the rapid deployment of new nuclear technologies, it is critical for the CRCPD to stay engaged to help shape the future and preserve the best practices built on past experience.** The strength and success of the CRCPD is directly related to the hard work and dedication of you, our members. The cooperation and coordination between

CRCPD'S ROLE

"With significant changes on the horizon, it is now more important than ever for the CRCPD to continue to be a proactive leader."

Patrick Mulligan

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FROM THE CHAIRPERSON
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THE "BIG PICTURE"

all the Committees and Task Forces and our many partners provides a framework for developing best practices for radiation protection across the country. Your efforts continue to ensure excellence with respect to public and health and safety.

2025 Organization of Agreement States Annual Meeting in Washington, D.C.

I had the honor and privilege to be invited to attend the Annual Meeting of the Organization of Agreement States (OAS) and provide a brief overview of CRCPD activities and cross cutting issues that affect both CRCPD and the National Materials Program. The four-day meeting was held from August 11th through the 14th in Washington, D.C. Either by good planning and foresight or just good fortune, the meeting location provided the opportunity for excellent federal agency participation considering their current travel restrictions. As a result, there was an amazing agenda put together that addressed a wide variety of important topics to the National Materials Program. **The meeting included a full day agenda dedicated to Fusion Technology that was both engaging and informative. Jeff Semancik (CT), the Chair of the CRCPD's E-47 Committee on Commercial Nuclear Power, provided a presentation summarizing the committees recently approved White Paper.** The paper identifies some of the key regulatory issues related to the commercial deployment of fusion machines, discusses available guidance, recommends radiation safety considerations, and describes best practices for regulating these technologies. Please see the article in this *Newsbrief* announcing the publication. Thanks again to OAS for the opportunity to participate.

OAS MEETING

"...there was an amazing agenda put together that addressed a wide variety of important topics to the National Materials Program."

Patrick Mulligan

FROM THE CHAIRPERSON
(continued)

THE "BIG PICTURE"

NRC Public Meeting on LNT and ALARA

I had the opportunity to represent the CRCPD at the NRC Public Meeting on July 16th to discuss Executive Order (EO) 14300 Section 5(b), Radiation Protection Framework. The EO directed the NRC to reconsider its use of the linear no threshold (LNT) model and its use of the radiation principle that aims to keep radiation exposures as low as is reasonably achievable (ALARA). The EO also directs the NRC to consider the use of determinate radiation dose limits. I had the opportunity to speak (for just 2 minutes!) and delivered the Board approved list of five key principles for evaluating the current framework as follows:

- Harmonization of radiation dose limits across all agencies and stakeholders. Now is the opportunity for the U.S. to adopt a national consensus standard.
- Maintain current dose limits while enhancing practicality. We recognize that industry needs may not align with medical best practices, and we suggest considering the development of separate thresholds for radiation in medicine and industry.
- Establish a *de minimis* threshold for regulation. The majority of those in the radiation protection community agree that there is a specific dose, from all sources, where health impacts begin. We suggest reaching consensus on that specific dose to establish a *de minimis* threshold that is based on current science.
- Use scientific updates to keep regulations current and appropriate. We must use current and new scientific studies without losing sight of the lessons learned from the history of our field.
- Ensure an independent regulatory authority. Just as we assign ultimate responsibility to a radiation safety officer, we need to maintain an independent level of commitment and accountability by having an independent regulatory authority.

EXECUTIVE ORDER (EO) 14300

"The EO directed the NRC to reconsider its use of the linear no threshold (LNT) model and its use of the radiation principle that aims to keep radiation exposures as low as is reasonably achievable (ALARA). The EO also directs the NRC to consider the use of determinate radiation dose limits."

Patrick Mulligan

FROM THE CHAIRPERSON
(continued)

The CRCPD Board followed up with NRC and provided more detailed comments on those same key points. The Board will continue to monitor progress on this issue and remain engaged in any discussions regarding proposed changes.

CRCPD Annual Commission Briefing

The CRCPD tri-Chairs continue to prepare for the annual NRC Commission briefing scheduled for October 7th at NRC Headquarters in Bethesda, Maryland. Each year the tri-Chairs from both CRCPD and OAS are invited to meet with the NRC Commissioners and provide a presentation and have discussions on the current topics that have cross cutting impacts for both the NRC and state radiation control programs. The proposed topics that will be covered in the session are:

- **State-to-State Assistance**, Sarah Sanderlin (OAS Chair)
- **Risk Assessment and Community Trust**, Patrick Mulligan (CRCPD Chair)
- **Fusion: How States are Doing and What Do They Still Need?** Beth Shelton (OAS Past Chair)
- **State Licensing, Registration, and Inspection of Machine Sources and How Fusion Rules Could Impact Those State Regulations**, Rikki Waller (CRCPD Past Chair)
- **Integrated Materials Performance Evaluation Program,** Becki Harisis (OAS Chair Elect)
- **Dose Modeling for Advanced Reactor Designs,** Tanya Ridgle (CRCPD Chair Elect)

Following the formal briefing, which is conducted in a public meeting format, the CRCPD and OAS tri-Chairs have the unique opportunity to meet with each of the Commissioners individually

TRI-CHAIRS PREPARE FOR ANNUAL NRC COMMISSION BRIEFING

"Each year the tri-Chairs from both CRCPD and OAS are invited to meet with the NRC Commissioners and provide a presentation and have discussions on the current topics that have cross cutting impacts for both the NRC and state radiation control programs."

Patrick Mulligan

FROM THE CHAIRPERSON
(continued)

THE "BIG PICTURE"

to have further discussions on a wide variety of topics. It always proves to be a rewarding experience and benefits everyone involved.

NRC Chats: Advanced Nuclear Technology, Small Modular Reactors and Microreactors

Continued implementation of the ADVANCE Act by the NRC and the Executive Orders issued earlier this year related to regulatory changes that would facilitate the licensing and deployment of advanced nuclear reactors indicate that advanced technology, including fusion, will be a reality in the near term. The CRCPD continues to stay engaged on a regular basis with NRC staff on the application of emergency preparedness principles for nuclear reactors of all types. **It is very important for both NRC and state radiation control programs to understand the challenges that widespread deployment of new nuclear technology will have for state and local emergency response and law enforcement organizations.** Coordination and cooperation between federal, state and local organizations will be key to building public trust and acceptance of new technologies into their communities. The CRCPD will continue to provide leadership and engagement with NRC to help meet the unique challenges of deployment of new nuclear technology.

We Need You

I encourage all our members to get involved and support the CRCPD's numerous ongoing projects and initiatives. The continued success of the CRCPD relies on the tireless efforts of you, our members. The CRCPD Board recognizes and appreciates the time and effort of our volunteers that serve on the many working groups and the contributions they make to support

BUILDING PUBLIC TRUST

"Coordination and cooperation between federal, state and local organizations will be key to building public trust and acceptance of new technologies into their communities."

Patrick Mulligan

FROM THE CHAIRPERSON

(continued)

radiation protection. As the CRCPD continues to expand the number of Working Groups and Task Forces to address emerging issues that face the radiation protection community, we call on each of you to consider getting involved or to help encourage some enthusiastic and interested staff to become members and get involved. Please be on the lookout for additional calls for volunteers to help our working groups. **I assure you that the experience is both gratifying and rewarding.** And we really count on your support for our continued success.

If you or one of your colleagues is interested in volunteering to serve on any of these working groups, you can reach or to me directly (Patrick.mulligan@dep.nj.gov) or fill out the Working Group Interest Form found on the CRCPD web site (www.crcpc.org) and submit it to Mendy Cremeans (mcremeans@crcpd.org).

WE THANK YOU

"The CRCPD Board recognizes and appreciates the time and effort of our volunteers that serve on the many working groups and the contributions they make to support radiation protection."

Patrick Mulligan

EXECUTIVE DIRECTOR'S MESSAGE

WORKING TO KEEP CRCPD RUNNING SMOOTHLY

by Lisa Bruedigan

It's hard to believe I'm already nearing the end of my second month with CRCPD.

Between learning the ins and outs of daily operations, keeping up with federal meetings, and tracking proposed changes, it's been a whirlwind. I've been an active member for 15 years and served on the Board three times, so I thought I understood how CRCPD functioned—but I had no idea how much work goes into keeping everything running smoothly. I owe a huge thank-you to Ruth and the Office of the Executive Director (OED) staff for all that they do behind the scenes.

Tracking Proposed Federal Changes

Alongside learning how CRCPD truly operates, I've been working closely with the Board to track numerous proposed federal changes. Some meetings have come with extremely short deadlines, but together we've ensured that CRCPD provides timely input on how these changes could affect state programs. A number of these proposals carry the potential for significant impact on our community, and the Board and I are monitoring them closely.

PROPOSED FEDERAL CHANGES

"A number of these proposals carry the potential for significant impact on our community, and the Board and I are monitoring them closely."

Lisa Bruedigan

EXECUTIVE DIRECTOR'S MESSAGE *(continued)*

WORKING TO KEEP CRCPD RUNNING SMOOTHLY

Understanding the Scope of CRCPD Work

To better understand the scope of work across the organization, I've asked to listen in on committee and working group calls. This has already been invaluable. **Many groups have overlapping areas of focus, and this broader awareness helps ensure we're not duplicating efforts—or missing something we assume another group is handling.**

Exploring New Partnerships

I've also begun conversations with a few professional organizations we haven't partnered with before. **I'm exploring whether we share mutual areas of interest and whether collaboration would benefit both sides.**

Grants

And then there are the grants. **We're incredibly grateful for the funding we receive, but as many of you know, managing grants is about much more than tracking funding periods.** Each grant requires multiple reports and documentation to show proper use, followed quickly by deadlines for the next round of applications. I'm especially thankful to the OED team for their expertise in this area and for making sure nothing slips through the cracks.

Thank You

In closing, I want to thank you for the opportunity to serve you in this role.

Please don't hesitate to reach out with questions, ideas, or concerns about how CRCPD can best serve this community.

UNDERSTANDING CRCPD'S SCOPE OF WORK

"To better understand the scope of work across the organization, I've asked to listen in on committee and working group calls. This has already been invaluable."

Lisa Bruedigan

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JUST RELEASED – CRCPD TECHNICAL WHITE PAPER STATE REGULATIONS OF FUSION MACHINES

by Lisa Bruedigan

The E-47 Committee on Commercial Nuclear Power has been hard at work and released a ***Technical White Paper: State Regulation of Fusion Machines***, approved by the CRCPD Board for publication.

This paper reviews key regulatory issues related to the commercial deployment of fusion machines, outlines available guidance, recommends radiation safety considerations, and—where possible—highlights best practices for regulating these technologies. It is intended to supplement guidance from the U.S. Nuclear Regulatory Commission (NRC) for regulating byproduct material used or produced by fusion machines.

As fusion machine technology advances, it is critical that states and partner federal agencies continue to share information and build upon each other's experiences.

Key regulatory topics addressed in this paper include:

- Fuel management
- Radiological dose compliance
- Neutron management
- Activation products
- Emergency planning
- Inspection and training

JUST RELEASED – CRCPD TECHNICAL WHITE PAPER STATE REGULATIONS OF FUSION MACHINES - *CONTINUED*

As of 2024, several states have licensed fusion machines, and additional facilities are proposed nationwide. Within state radiation control programs, the radioactive materials and x-ray programs are collaborating to develop licensing approaches that ensure safe and effective oversight of both radioactive materials and other radiation hazards.

Fusion machines vary significantly in design and operation, making the licensing and inspection of these facilities increasingly complex. Ongoing coordination between states and the NRC will be essential to ensure consistent regulatory approaches as more licenses are issued.

This paper outlines many of the complex scientific and technological factors that will require continued evaluation and refinement as experience is gained. CRCPD supports the growth of fusion energy and stands ready to assist by facilitating coordination, information exchange, and resource sharing among regulators.

CRCPD's E-47 Committee on Commercial Nuclear Power Members included:

- Jeff Semancik, Chair (CT)
- Members - Megan Shober (WI), Szymon Mudrewicz (MA), and David Lafleur (PA).
- Advisors - Kim Steves (CRCPD), Stefanie Blum (TX-DSHS), Sarah Brodesser (OR), and Jill Wood (WA).
- Resource Individuals -Duncan White (US NRC) and Michael Wilt (US FEMA).
- Consultant Member - Michael Hua, PhD (Helion Energy).

Technical White Paper: State Regulations of Fusion Machines, CRCPD Publication 25-2 is available free of charge at this link.

PUBLIC HEALTH DECISION MAKING IN A RADIATION EMERGENCY:

TRAIN-THE-TRAINER COURSE - ATLANTA, GEORGIA, JULY 14-18

Report by Trae Windham *(RT)R* (TX) and

Commentary by Amy Hass (MN)

The U.S. Centers for Disease Control and Prevention (CDC) asked SciMetrika to develop the Public Health Decision Making in a Radiation Emergency course as a curriculum that focuses on key decision-making needs in a radiation emergency. The course was designed for professionals (public health, emergency management, radiation control) at the local, state and federal levels who are expected to take on decision-making roles or accommodate those who do. To support the growing demand for course delivery CDC requested Oak Ridge Associated Universities (ORAU) to develop a Train-the-Trainer version of the course and work with SciMetrika to ensure the added adult learning content aligns with the curriculum.

"I had the privilege of attending the CDC's Train-the-Trainer course, Public Health Decision Making for Radiation Emergencies, alongside a knowledgeable and dedicated group of radiation emergency professionals.

This training not only deepened my understanding of effective response strategies but also equips me to bring this critical knowledge back to our region. By delivering this course locally, we can enhance the preparedness of emergency management, public health, and response teams. Through the capstone project and practical guidance, participants will be better prepared to integrate key decision-making considerations into their plans and procedures—ultimately improving support for communities impacted by radiological incidents."

Amy Hass (MN)

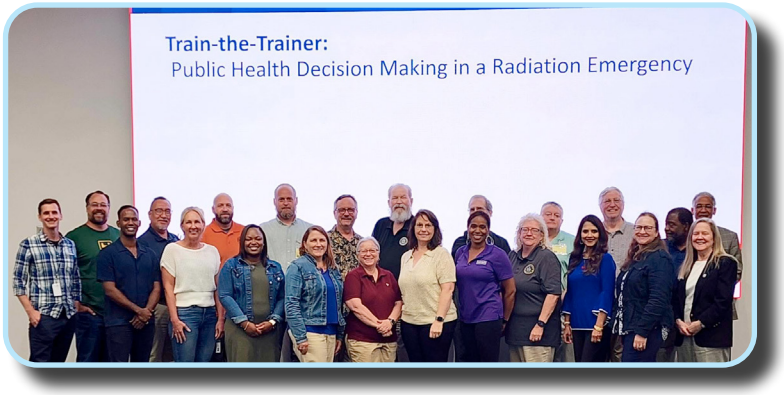
PUBLIC HEALTH DECISION MAKING IN A RADIATION EMERGENCY: TRAIN-THE-TRAINER COURSE - ATLANTA, GEORGIA, JULY 14-18 - CONTINUED

The goal of the Train-the-Trainer course is to prepare a cadre of course instructors that could deliver the training for the next several years. The course was designed for an initial cadre of 10-12 Type1/Type 2 Radiological Operations Support Specialists (ROSS) that would be available to deliver the course in their state or as part of a regional training event in the foreseeable future. The five-day course includes the core content of the Public Health Decision Making in a Radiation Emergency course as well as several modules focused on adult learning concepts, and it provides opportunities for the students to demonstrate understanding of the materials through teach-back and other feedback opportunities. The course includes a facilitator guide that has instructor-specific content and provides insights and examples for how the course resources could be used to deliver the training.

"Emergency response for a radiological or nuclear event is largely about preparing for an ever-moving and unknown series of circumstances using years of knowledge and procedural planning that have never, or rarely, been put into practice. The best way to train for such events is to rely on the expertise, intense research, and years of dedicated professional service of the distinguished individuals who have come before us."

Trae Windham (TX)

In July, the CDC sponsored a weeklong Train-the-Trainer program held at its headquarters in Atlanta, Georgia. This course was designed to not only teach the three-day "Public Health Decision Making in a Radiation Emergency," but also to train a group of selected individuals in techniques designed to prepare them to teach the course across the nation.



Training Program Participants, Atlanta, Georgia 2025

PUBLIC HEALTH DECISION MAKING IN A RADIATION EMERGENCY: TRAIN-THE-TRAINER COURSE - ATLANTA, GEORGIA, JULY 14-18 - *CONTINUED*

CRCPD sponsored the attendance for these individuals allowing them to be taught and coached to teach aspects of radiological and nuclear emergency response, including:

- evacuation
- shelter in place
- responder health and safety
- early medical care population monitoring and public sheltering
- dose assessment
- dose reconstruction radiation exposure
- fatality management
- health surveillance
- relocation, re-entry, and return

The week-long train-the-trainer course concluded with a capstone exercise and course hotwash.

During the course, participants were also asked to demonstrate their ability to present portions of the course to their peers as well as their trainers to receive constructive feedback gauging their performance and extend improvement tips to make them more effective trainers and presenters.

The opportunity to be trained and coached by some of the very people who have helped write the book on radiological and nuclear emergency response was a truly unique and invaluable experience. CRCPD would like to offer its sincerest gratitude to all those involved.

Report by Trae Windham (RT)R (TX)

FIERY YUCCA RAP REGION 4 EXERCISE

Report by Trae Windham *(RT)R* (TX) and

Commentary by Amy Hass (MN)

The first RAP/CM regional exercise was executed July 30 - August 1, 2025, in Albuquerque, NM. The exercise was an opportunity to training responders and work with our state and local partners. CRCPD representatives Amy Hass (MN) and Trae Windham (TX) participated in the event.

Recently, the Office of Nuclear Incident Response invited CRCPD to provide two representatives to mentor and evaluate state radiological and agriculture personnel from New Mexico during its first Radiological Assistance Program (RAP) / Consequence Management (CM) regional exercise, formally known as Fiery Yucca. This week-long exercise took place July 30th through August 1st, 2025, in Albuquerque, New Mexico.

During this exercise, the response to a high-activity medical irradiator involved in an explosion and fire, which released Cs-137 to the environment, was evaluated. The evaluation included multiple aspects of response, ranging from initial notification to the evaluation and planning of recovery and return, including considerations for the environmental and agricultural effects of the release.

PARTICIPANTS

RAP regions 4, 6, and 7 Consequence Management Advanced Command (CMAC)

Consequence Management Home Team (CMHT)

Department of Energy Watch Office Nuclear Incident Team

Radiation Emergency Assistance Center/ Training Site (REAC/TS)

Federal Bureau of Investigation (FBI)

64th Weapons of Mass Destruction Civil Support Team (CST)

University of New Mexico Health System

Bernalillo County

City of Albuquerque

State of New Mexico

FIERY YUCCA RAP REGION 4 EXERCISE - *CONTINUED*

The initial incident and response were staged at the Balloon Fiesta Park in Albuquerque, NM, and extended to include the Bernalillo County Emergency Operations Center (EOC) and additional areas of Albuquerque utilized by field teams to conduct surveillance and sampling activities.

The carefully planned exercise utilized multiple injections designed to adequately evaluate all of the players' abilities to meet pre-determined strategic objectives, including:

- Environmental Response / Health and Safety
- Operational Coordination
- Situational Assessment
- Environmental Response
- Hazard Identification and Scene Size-Up
- Isolation and Scene Control
- Integration into a Unified Command
- Public Health
- Healthcare and Emergency Medical Services
- Responder Safety
- Environmental Response Health and Safety

With the exercise being designed to simulate three phases of operational planning, initial, early, and intermediate/long-term, agencies were allowed to concentrate acutely on their plans in a no-fault environment. After each exercise day, local hot washes were conducted to allow players to discuss the successes and failures that occurred during each phase of operation. The exercise concluded on August 1st with a players and controllers brief in which the initial summaries were discussed as well as considerations for improved future exercises.

This event offered all agencies a unique opportunity to train and integrate in a manner typically reserved for larger Cobalt Magnet exercise operations. It offered an extraordinary opportunity for all participating partners to test their plans to ensure that we are all ready for the most intricate and trying scenarios and remain confident that the nation is ready to respond in the face of adversity.

Trae Windham (RT)R (TX)

"Thank you again for the warm reception for letting us attend Fiery Yucca exercise in Albuquerque last week. I really enjoyed discussing radiological emergency preparedness with you and I took back a few best practices that I will incorporate into our program."

Amy Hass (MN)

RADIOLOGICAL ASSISTANCE PROGRAM TRAINING FOR EMERGENCY RESPONSE (RAPTER) COURSES IN 2026

OPPORTUNITY TO ATTEND

by Tanya Ridgle(LA CO, CA)

The 2026 RAPTER courses are scheduled for dates and RAP regions in 2026 and will be held at the Department of Energy (DOE) Las Vegas Field Office. The Radiological Assistance Programs (RAP) Regions and the draft schedule agenda for the recent 2025 RAPTER courses are on the following pages. If you have any questions, do not hesitate to contact, Lisa Bruedigan, CRCPD Executive Director, lbruedigan@crcpd.org

ABOUT THE COURSE

This course is for decision-makers (not field monitoring personnel). States should provide personnel versed in the state's role in radiation emergency response. Personnel should also have a CBRN Responder account as CBRN Responder will be used during the RAPTER training exercises. We also want to include some non-nuclear power reactor states to start to fill the gap on emergency preparedness in those states; CRCPD will provide a good mix of personnel to ensure that more experienced state personnel can serve as mentors to those less experienced in each class.

DATES AND REGIONS

MARCH 16-20, 2026; RAP REGIONS 1, 2, 4

MARCH 23-27, 2026; RAP REGIONS 1, 3, 4

APRIL 13-17, 2026; RAP REGIONS 6, 7

APRIL 20-24, 2026; RAP REGIONS 5, 7

FUNDING OPPORTUNITY

CRCPD will fund up to twelve state radiation control staff to attend the weeklong courses. CRCPD will pay all travel costs for the persons chosen from each RAP region to attend.

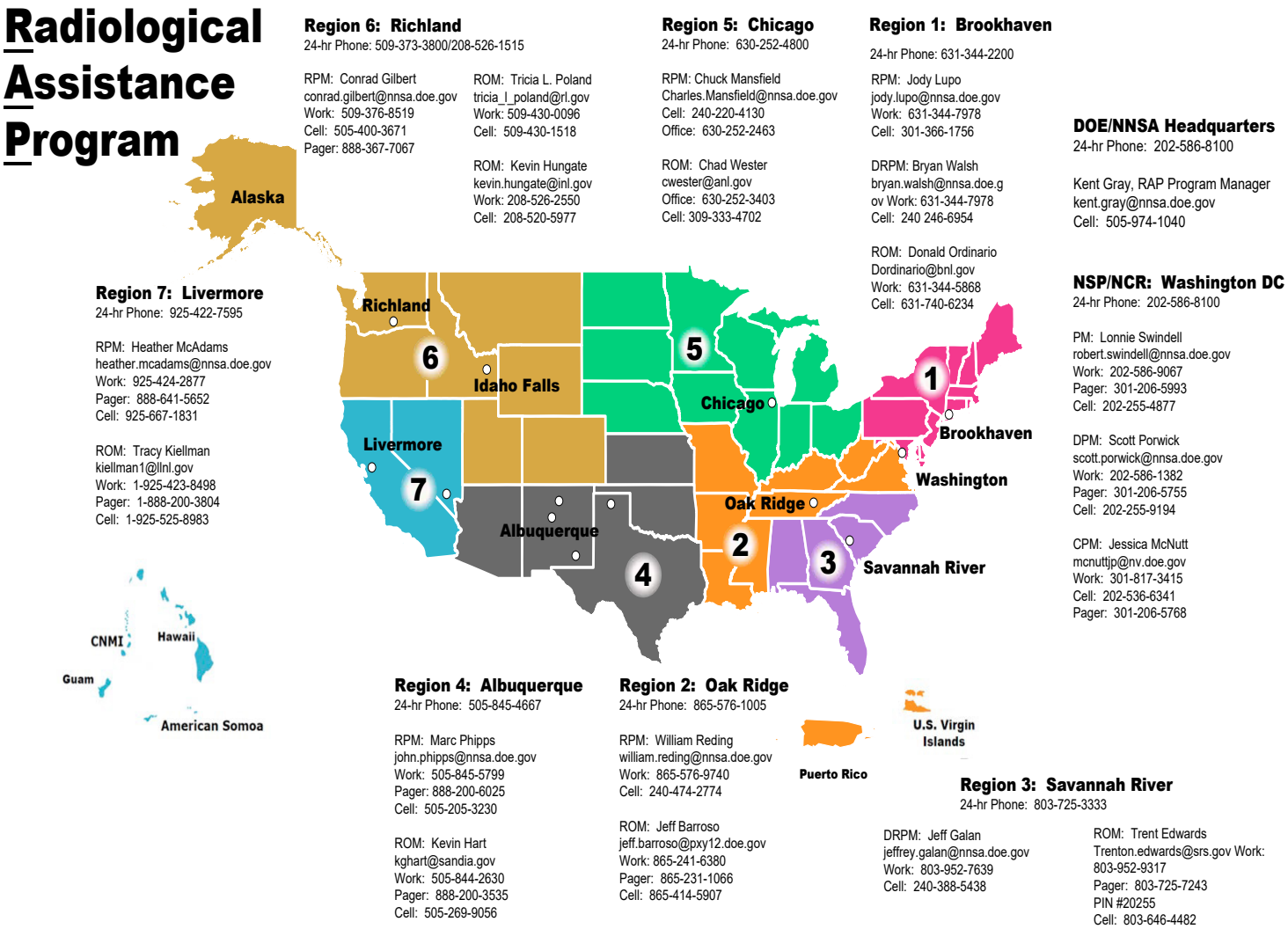
HOW TO APPLY

Send nominations to Tanya Ridgle (LA County), CRCPD's Emergency Response Training Coordinator at tanya.ridgle@cdph.ca.gov. Copy Lisa Bruedigan on the nomination at lbruedigan@crcpd.org

For each nominee, provide a brief description of their duties in the radiation control program and potential for emergency response duties, if those are not already included.

RADIOLOGICAL ASSISTANCE PROGRAM TRAINING FOR EMERGENCY RESPONSE (RAPTER) COURSES IN 2026 - *CONTINUED*

RAPTER REGIONS



July 2024

RADIOLOGICAL ASSISTANCE PROGRAM TRAINING FOR EMERGENCY RESPONSE (RAPTER) COURSES IN 2026 - *CONTINUED*

RAPTER FEEDBACK

- "Absolute wealth of knowledge and experience in the room."
- "Enjoyed learning about the various functions associated with RAP and the sheer number of resources at their disposal."
- "Drills were expertly designed and facilitated."
- "Awesome to interface and get to know my RAP and FBI partners."
- "Drills were a ton of fun!"
- "I was scared at the beginning of the training, but I left feeling confident that I could respond to a radiological emergency in my region and work with my federal partners."

DRAFT SCHEDULE AGENDA FOR RAPTER 2025 COURSES

RAPTER STUDENT SCHEDULE - WEEK OF APRIL 21

	Monday						Tuesday (Round Robin Drills)						Wednesday - Friday (Exercises)					
	HPSP	TS	TC	TL	State	FBI	HPSP	TS	TC	TL	State	FBI	HPSP	TS	TC	TL	State	FBI
7:00							Daily Brief (7:00 - 7:15)						Arrive at NSF (7:00 - 7:15)					
7:15													Safety Brief (7:15) / Scenario start at 0720					
7:30	Registration (7:30 – 8:00)										Arrive at NSF (7:30)							
7:45											NEST Overview 7:45 - 8:30 (Searchlight)							
8:00	Introductions, Expectations, Safety Briefing, Team Intro 8:00 - 9:15 (Great Basin R)						Round Robin 1 (7:15 - 9:45) Team A: CM Drill (Equipment: GBL, Ops: Sedan) Team B: Reachback (Equipment: GBL, Ops: Amargosa) Team C: Search Drill (Equipment: GBR, Ops: GBR)											
8:15																		
8:30											Break (8:30 - 8:45)							
8:45											Equipment Familiarization 8:45 - 9:45 (Searchlight)							
9:00																		
9:15	Break (9:15 - 9:30)																	
9:30	Lessons Learned - Responses 9:30 - 10:45 (Great Basin R)																	
9:45							Break (9:45 - 10:00)											
10:00																		
10:15																		
10:30							Round Robin 2 (10:00 - 12:30) Team A: Search Drill (Equipment: GBL, Ops: Sedan) Team B: CM Drill (Equipment: GBL, Ops: Amargosa) Team C: Reachback (Equipment: GBR, Ops: GBR)											
10:45	Lessons Learned - Equipment / Software 10:45 - 12:00 (Great Basin R)										Exercise Overview 10:00 - 11:30 (Searchlight)							
11:00																		
11:15																		
11:30											Break (11:30 - 11:45)							
11:45											State Roles & Responsibilities (Castle Rock)	FBI Roles & Responsibilities (Searchlight)						
12:00	Lunch 12:00 - 12:45												Exercise 7:20 - 4:45 Team A - Equipment: GBL, Ops: Sedan Team B - Equipment: GBL, Ops: Amargosa Team C - Equipment: GBR, Ops: GBR					
12:15											Lunch (12:15 - 1:00)							
12:30							Lunch (12:30 - 1:15)											
12:45	Lessons Learned - Comms 12:45 - 2:00 (Great Basin R)																	
1:00											Transit to RSL-Nellis							
1:15																		
1:30							Round Robin 3 (1:15 - 3:45) Team A: Reachback (Equipment: GBL, Ops: Sedan) Team B: Search Drill(Equipment: GBL, Ops: Amargosa) Team C: CM Drill (Equipment: GBR, Ops: GBR)				RSL Tour (1:30 - 3:00)							
1:45																		
2:00	Break (2:00 - 2:15)																	
2:15	FBI and Explosives Presentations 2:15 - 3:30) (Great Basin R)																	
2:30																		
2:45																		
3:00											Return to NSF							
3:15																		
3:30	Transit to Las Vegas Fire & Rescue Range (3:30 - 4:15)																	
3:45							Break (3:45 - 4:00)											
4:00							Exercise Brief (4:00 - 4:15)											
4:15	Range Demo at LVFR Range						Team Prep (4:15 - 5:00)											
4:30																		
4:45													RAP Team Hot Wash (4:45 - 5:00)					
5:00							End of Day						Re-set Equipment / SitRep 5:00 - 5:45					
5:15																		
5:30	End of Day												End of Day					
5:45																		

Great Basin L = GBL
Great Basin R = GBR
LVFR Range: 7600 East Carey Ave, Las Vegas, NV 89156

INDOOR ENVIRONMENTS ASSOCIATION (IEA) RADON AND VAPOR INTRUSION SYMPOSIUM

OCTOBER 27-29, 2025

CRCPD BUILDING TECHNICAL CAPACITY (BTC) TRAINING ON RADON MITIGATION

SUNDAY, OCTOBER 26, 2025

By Kim Steves, Conference of Radiation Control Program Directors, Inc.

The Indoor Environments Association (IEA) Radon and Vapor Intrusion Symposium is October 27-29, 2025 in Fort Worth, Texas and the CRCPD Building Technical Capacity (BTC) training will be offered on October 26, 2025. This training will be free of cost and is only for state and tribal representatives who are registered for the symposium.

The Indoor Environments Association Radon and Vapor Intrusion Symposium is the premier opportunity each year for states and tribes to come together with our partners in industry and on the federal level to learn from each other and address radon risk reduction endeavors.

The CRCPD E-25 Committee on Radon has worked closely with IEA to develop the symposium program agenda and, along with plenary sessions providing critical current information, we have an excellent state and tribal track of presenters scheduled for the Tuesday of the symposium.

IEA SYMPOSIUM INFORMATION

October 27-29, 2025

Fort Worth, Texas

Omni Fort Worth Hotel

https://aarst.org/symposium

REGISTRATION

https://aarst.org/56055-2/

AGENDAS

https://aarst.org/symposium/event-schedule/

INDOOR ENVIRONMENTS ASSOCIATION (IEA) RADON AND VAPOR INTRUSION SYMPOSIUM AND CRCPD BUILDING TECHNICAL CAPACITY (BTC) TRAINING ON RADON MITIGATION - *CONTINUED*

CRCPD'S BUILDING TECHNICAL CAPACITY (BTC) TRAINING ON RADON MITIGATION

Sunday, October 26, 2025

Fort Worth, Texas

Omni Fort Worth Hotel

REGISTRATION

https://aarst.org/56055-2/

Link for state and tribal members to register for the CRCPD BTC training and to get the discounted registration fee of $800 for the symposium

Please note: This link is only for state and tribal members to use. IEA is supporting the states and tribes by maintaining their early-bird registration fee (which expired for the industry on July 1) due to the length of time it takes to obtain out of state travel approval.

CONTACT

Joshua Kerber at joshua.kerber@state.mn.us

On Sunday, October 26, CRCPD is offering a Building Technical Capacity (BTC) training on radon mitigation in conjunction with the IEA Symposium. The BTC training will be free of cost and is only for state and tribal representatives who are registered for the symposium.

CRCPD Building Technical Capacity Training for States and Tribes

Optimal Mitigation & Advanced Diagnostics Training for States and Tribes

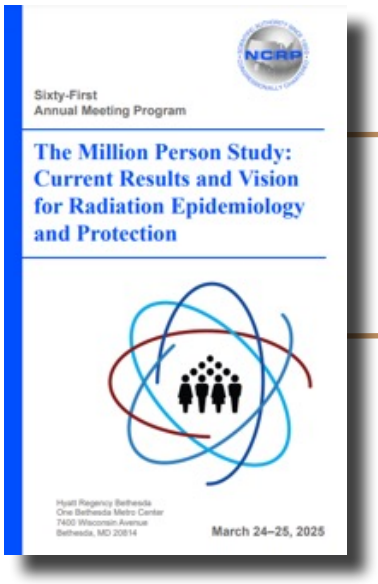
Sunday, October 26, 2025
Omni Fort Worth Hotel

Instructors:
Joshua Kerber (Minnesota Radon Program)
Chad Robinson (Building Performance Co, Salina, KS)
Bruce Snead (National Radon Program Services/Kansas State University)

Agenda

8:00	**Introductions, Expectations, and Q&A**
8:30	**Intro Videos and Pre-training Questions for Participants**
9:00	**How Radon Enters Buildings**
9:30	**Radon Fan Discussion and Device Overviews**
10:00	**Sealing and Suction Point Case Studies**
10:30	**Pressure Field Extension (PFE) and Diagnostic Station Activity**
11:30	**Lunch**
1:00	**Fan Performance and Hands-on Station Activity**
2:00	**Air Flow and Pipe Resistance with Hands-on Station Activity**
3:00	**Putting it All Together: Fan Selection Examples - Floor Plan with PFE and Pipe Systems**
3:30	**Houses from Heck and How Best Approach Them**
4:30	**Post-training Questions for Participants and Evaluations**
5:00	**Adjourn**

Looking forward to seeing you at the Symposium!



NCRP: ANNUAL MEETING & UPDATE

David J. Allard, CHP (G-50 Liaison)*

*As the G-50 Liaison to NRCP it was again my honor and pleasure to attend the annual meeting of the National Council on Radiation Protection and Measurement (NCRP) in Bethesda, MD on March 24-25, 2025. The meeting theme this year was **The Million Person Study (MPS)**, with an outstanding program organized by Nicole Martinez and Lawrence Dauer.*

MEETING DETAILS

The welcome and introductions were given by NCRP President Kathy Higley. As in the past, NCRP has posted the full annual meeting program with abstracts and speaker bios online [Ref. 1]. On the morning of the second day, President Higley conducted the business meeting, and gave a verbal update on the NCRP's activities in CY24. The Council's Annual Report was just recently posted online [Ref 2].

CRCPD: A COLLABORATING ORGANIZATION

CRCPD has a number of members on the Council and various committees, is a formal 'Collaborating Organization,' and thus, has the opportunity to comment on draft documents at the time they are submitted to the members of the full Council. In fact, as noted in the April *Newsbrief*, our own Ruth McBurney has been a very active NCRP member for years, and was honored during the annual meeting when she was elected to the status of Distinguished Emeritus Member.

Given the CRCPD's major national role in ensuring radiation protection of the public, workers, and environment, recommendations of NCRP are essential guidance for those implementing government and private sector radiation safety programs.

**Note: opinions and statements in the article are mine, and may not reflect those of the CRCPD Board or its members. - DJA*

NCRP: ANNUAL MEETING & UPDATE - CONTINUED

NCRP ROOTS AND MISSION

NCRP has its roots in the U.S. Advisory Committee on X-Ray and Radium Protection that functioned from 1930s through 1950s. However, after WWII with above ground nuclear weapons testing, fallout, expanding use of radioactive material and machine sources of radiation, nuclear reactor development, etc., the ad hoc and expanding nature and mission of the Advisory Committee changed. A mission and more formal approach was needed to address not only acute radiation effects, but potential risk of cancer and other radiation protection issues. This prompted Lauriston Taylor and others to work on formally establishing the NCRP, and in 1964 Congress passed a law and Chartered the current Council as a nonprofit corporation [Ref 3].

NCRP Mission

Support radiation protection by providing independent scientific analysis, information and recommendations that represent the consensus of leading scientists.

The NCRP was established to:

- Collect, analyze, develop and disseminate in the public interest information and recommendations about (a) protection against radiation and (b) radiation measurements, quantities and units, particularly those concerned with radiation protection;
- Provide a means by which organizations concerned with the scientific and related aspects of radiation protection and of radiation quantities, units and measurements may cooperate for effective utilization of their combined resources, and to stimulate the work of such organizations;
- Develop basic concepts about radiation quantities, units and measurements, about the application of these concepts, and about radiation protection; and,
- Cooperate with the International Commission on Radiological Protection, the International Commission on Radiation Units and Measurements, and other national and international organizations, governmental and private, concerned with radiation quantities, units and measurements and with radiation protection.

NCRP: ANNUAL MEETING & UPDATE *CONTINUED*

NCRP PROGRAM AREA COMMITTEES (PAC) AND RESPECTIVE SCIENTIFIC COMMITTEES (SC) ACTIVELY ENGAGED IN FORMULATING NEW RECOMMENDATIONS

PAC 1: Basic Criteria, Epidemiology, Radiobiology, and Risk

PAC 2: Operational Radiation Safety

SC 2-9 Radiation Safety Program Concerns Transitioning from Operating Facility to Decommissioning Phase

PAC 3: Nuclear and Radiological Security and Safety

PAC 4: Radiation Protection in Medicine

SC 4-13 Patient Shielding in Medical Imaging

PAC 5: Environmental Radiation and Radioactive Waste Issues

PAC 6: Radiation Measurements and Dosimetry

SC 6-13 Methods and Models for Estimating Organ Doses from Intakes of Radium

PAC 7: Radiation Education, Risk Communication, and Outreach

PAC 8: Nonionizing Radiation

SC 8-1 Development of NCRP Informational Webpages to Provide Authoritative Information About the Use of Wireless Technology and Current Evidence on Health Effects.

Through the years, vast amounts of information has been collected and analyzed by NCRP, and then disseminated as recommendations to the radiation protection community and the interested public as NCRP Reports, Commentaries, and Statements. This information is often the basis for key federal and state regulations and guides [Ref 4].

2024 PUBLICATIONS

In 2024, no NCRP Reports were published, but ***Commentary No. 34 Recommendations on Statistical Approaches to Account for Dose Uncertainties in Radiation Epidemiologic Risk Models*** was issued. This Commentary reviews the different types of uncertainty and error related to radiation dose estimation, and provides an overview of dosimetric uncertainties in exposure studies with their effects on radiation epidemiologic risk regressions. The Commentary also reviews several different analytic methods commonly used to adjust for the effect of dose measurement error. Each method has advantages and disadvantages that need to be weighed in each individual application.

NCRP: ANNUAL MEETING & UPDATE - *CONTINUED*

THE MILLION PERSON STUDY

Presentations at this year's annual meeting covering ***The Million Person Study*** were especially timely given the recent Presidential Executive Order (EO) No. 14300 of May 23, 2025 ordering the reform of the Nuclear Regulatory Commission [Ref. 5]. Within that EO, statements related to the use of the linear no-threshold (LNT) and the as-low-as-reasonably-achievable (ALARA) approach to radiation protection have caused a significant amount of discussion.

> Executive Order 14300 "The NRC utilizes safety models that posit there is no safe threshold of radiation exposure and that harm is directly proportional to the amount of exposure. Those models lack sound scientific basis and produce irrational results, such as requiring that nuclear plants protect against radiation below naturally occurring levels."

The EO prompted additional published opinion statements by officials in the American Association of Physicists in Medicine (AAPM), American Nuclear Society (ANS), and the Health Physics Society (HPS). Additionally, two online open forum style discussions were organized by the NCRP and HPS.

However, it is worth noting that both the Nuclear Regulatory Commission (NRC) and NCRP, as well as the International Commission on Radiation Protection (ICRP) and the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), have recently and formally addressed the use for the LNT model [Ref 6 and Ref 7]. The NRC stated, in their denial of several related petitions requesting they stop using the LNT model, "the use LNT is the basis for their regulatory framework to meet the 'adequate protection' standard of the Atomic Energy Act of 1954." Given the LNT model is the fundamental basis for all regulatory dose limits for workers and the public, it will be of great interest to all in the field of radiation protection and control, to follow this anticipated review.

The full title of year's annual meeting was the ***Million Person Study: Current Results and Vision for Radiation Epidemiology and Protection***. This topic is very interesting and covers an ongoing major effort initiated by Dr. John Boice several years ago to improve the knowledge base for low-level dose and dose rate radiation effects [Ref 8]. It is widely accepted that acute whole body radiation exposure to levels above 10 rem

THE MILLION PERSON STUDY CONTINUED

[0.10 Sv] has the potential to cause cancer. But because of the very large number of exposed individuals required to detect with statistical significance above background cancer rates, radiation exposure to humans at low dose rate and low levels, actual cancer risk has not been well established. Nonetheless, over the years numerous molecular, cellular, animal, human, and other radiation biology studies suggest there is some small level of risk. But there are always complicating factors, such as age of exposure, sex, individual sensitivity, organs irradiated, etc. Thus, for decades the use of LNT and ALARA in radiation protection practice has been used and debated. Even so, prominent professional and scientific organizations continue to recommend their use as prudent, and various federal and state governmental agencies have codified these constructs and policies into regulation. It is the desire of the NCRP to use the results of the MPS to address these concerns.

> Given the ongoing and more recent debate and scientific reviews of the LNT model, the recent EO and the timeframe NRC has been ordered to resolve the issue and propose updates to their regulations, all members of the CRCPD and radiation protection community should follow this issue closely.

Recently one MPS researcher (Lawrence Daur) published a an open access summary of the MPS [Ref 9]. Specifically, his article notes the study has been ongoing for two decades, and includes only U.S. workers and veterans within 30 epidemiologic sub-cohorts. These separate studies focus on hundreds of thousands of medical, AEC/DOE, Navy, and commercial nuclear program workers, radium dial painters, and military veterans involved with weapons tests. Dozens of papers have already been published, and looking forward, the final results should provide support for appropriate radiation risk models – be it LNT or some threshold approach.

In several official publications, NCRP and ICRP have recently stated the LNT model "remains a prudent basis for radiation protection at low doses and low dose rates" [Ref. 10]. And, given the EO is focused on getting NRC regulatory updates published in consultation with the "Environmental Protection Agency (EPA), the Department of Energy (DOE) and the Department of Defense (DoD)" in months, one must wonder if all the potential results of the MPS can be utilized. Additionally, the EO

NCRP: ANNUAL MEETING & UPDATE *CONTINUED*

THE MILLION PERSON STUDY - *CONTINUED*

doesn't require EPA and DOE, or the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA), the Federal Aviation Administration (FAA0, and the National Aeronautics and Space Administration (NASA), to review and update their radiation protection regulations, guidance and standards. Looking forward, if just the NRC updates their regulations, one could see an increase in non-uniformity and gaps in radiation protection regulations.

ADDITIONAL PRESENTATIONS AT THE MEETING

Challenges Faced by Studies of Nuclear Industry Workers by Richard Wakeford (University of Manchester)

Why Million Person Study? by Nicole E. Martinez (Clemson University)

Million Person Study Status & Summary Overview by Lawrence T. Dauer (Memorial Sloan Kettering)

Opportunities for the Future of Million Person Study by Amir A. Bahadori (Kansas State University)

Million Person Study Vital Status, Incidence & Mortality by Michael Mumma (Vanderbilt University)

U.S. DOE Radiation Cohorts: Importance to the Million Person Study by Ashley P. Golden (ORAU)

No Differences in Cancer Risk Related to Low-level Protracted Radiation Exposure for Early & Contemporary Workers in Two Million Person Study Cohorts by Linda Walsh (University of Zurich)

Subs & Space: Million Person Study Multiple Stressor Study by Loren P. Lipworth (Vanderbilt University)

Age- & Sex-Specific Biokinetic Models for Radium Worker Epidemiology by R Leggett & C Samuels (ORNL)

Importance of Human Data: U.S. Transuranium and Uranium Registries by S Tolmachev (Wash. State Univ.)

Radium Dial Painter: Dosimetry by Derek W. Jokisch (Francis Marion University)

50 Million Person-Years of Dosimetry by Michael B. Bellamy (Memorial Sloan Kettering Cancer Center)

Sex-Specific Differences in Lung Cancer Radiation Risk by David J. Pawel (U.S. EPA, retired)

Colossus: Bridging the Gap Between Big Data and Radiation Epidemiology by Eric Giunta (Kansas State Univ)

Need for Dosimetry Models for Circulatory Disease Organ / Tissues by Wesley E. Bolch (University of Florida)

Epidemiologic Contributions to Radiation Risk Assessment by Roy E. Shore (New York University)

Integrating Genomics & Epidemiology to Provide New Insights into Radiation-Related Cancer Risks by L Morton (NCI)

NCRP: ANNUAL MEETING & UPDATE *CONTINUED*

In closing I'd also say, it is always nice to see and talk to friends and colleagues at the NCRP Annual Meeting. It is always good to hear about other radiation protection issues through informal sidebar discussions. Do watch the NCRP's website for new publications and future meeting information.

On this last point, I am sorry to hear and report, there may not be an in-person 2026 Annual Meeting next March. If that remains the case, perhaps the NCRP could do a short virtual technical meeting, followed by the annual business meeting.

CRCPD MEMBERS AT THE NCRP MEETING

MARCH 2025

Front L to R: Frieda Fisher-Tyler, Ruth McBurney, Jennifer Elee, Debra McBaugh Scroggs, Adela Salame-Alfie.

Back L to R: Angela Leek, Clark Eldredge, Lisa Bruedigan, Dave Allard.

Not Present for Photo, but attending the meeting: Bill Irwin

HOW NUCLEAR STRUCTURE STUDIES AFFECT THE USE AND HANDLING OF THE MEDICAL RADIOISOTOPE LUTETIUM-177

by Samuel Ajayi, PhD Nuclear Physicist

Every nuclear regulatory worker is aware that the disposal of radioactive waste poses a significant concern in terms of radiation protection. How you handle radioactive waste can lead to environmental contamination and adversely affect people's health. Our hospitals, in the 21st century, have become a major source of radioactive waste because of the increase in the use of medical radioisotopes for diagnosis and therapy. Understanding how these radioisotopes emit their radiation is important to the task of protecting the environment. Since the emission is based on the constituents of the nucleus of the radioisotopes, studying their nuclear structure is therefore important to safeguarding the health of the people.

Nuclear Structure

Nuclear structure is a unit in nuclear physics that seeks to understand the constituents of the atomic nucleus and how they are organized. Through nuclear structure studies, we can gain vital information about the different states of different atomic nuclei, which have vital applications in the medical field and beyond. The important properties of these states include energy, spin, parity, lifetime (or half-life), and many more. The nucleus has a ground state where its energy is zero, and multiple excited states where the energy is non-zero. The excited states are usually unstable and therefore find ways to achieve stability by decaying either to another nucleus or its own ground state. They emit alpha particles, beta particles, protons, neutrons or gamma-rays in the process of decaying.

HOW NUCLEAR STRUCTURE STUDIES AFFECT THE USE AND HANDLING OF THE MEDICAL RADIOISOTOPE LUTETIUM-177 - *CONTINUED*

Radioisotope Production

As a Nuclear Physicist, focusing on nuclear structure, my first goal in studying radioisotopes is to produce the radioisotopes of interest in their excited states. There are different types of reactions which can be chosen based on the excited states we wish to populate in our nucleus of interest. Almost all the reactions have in common the fact that the nucleus of an atom is merged with the nucleus of another atom at very high energy and angular momentum. The tandem or linear accelerator, for example, can be used to accelerate particles to a very high energy and hit a target material to form a nuclear reaction. The atomic nucleus of interest is created at an excited state, and the radiation emitted is detected with specialized detectors and analyzed. The result from the analysis gives necessary information about the excited states, which is summarized in a diagram called a level scheme.

Lutetium- 177

Lutetium- 177, like any other nucleus, has been studied, and information about its excited states makes it suitable for radiotherapy and diagnostics. **It emits beta particles, which can be used to kill cancerous cells, and also low-energy gamma rays, which can be used to image the body.** This dual-purpose use of Lu-177 makes it classified as a **theranostic** radionuclide. That, however, is not all that is to be known about the implications of its excited states. **The excited states have major implications for how the radionuclide should be handled.** Given that the spin/parity of the ground state is 7/2+, it is easy to calculate the spin/parity of the first few excited states as 9/2+, 11/2+, 13/2+, 15/2+, 17/2+, and 23/2- using angular distribution and polarization measurements.

Implications for Radiation Protection

Without worrying too much about the physics methodologies used to derive spins and parities, we can simply shift attention to the implications of these excited states for radiation protection. **The 23/2- state is a meta state at energy level 970 keV with a half-life of 160.4 days.** Excited states of nuclei typically have lifetimes (or half-lives) in the order of picoseconds. Excited states with half-lives way greater than that imply a significant delay in the decay from those states. It means while all the states below 23/2- meta state are decaying via gamma or beta emission,

HOW NUCLEAR STRUCTURE STUDIES AFFECT THE USE AND HANDLING OF THE MEDICAL RADIOISOTOPE LUTETIUM-177 - *CONTINUED*

the meta state will not start decaying. The half-life of the Lu- 177, which is also not stable in the ground state, is 6.6 days, so it therefore also decays to Hafnium- 177 (Hf- 177) before the meta state starts decaying. When the meta state eventually starts decaying, it decays via both beta particles to another meta state of Hf- 177 and via a 116 keV gamma ray to the 17/2+ state of Lu- 177. Irrespective of the decay path, a cascade of gamma-ray transitions is formed down to the ground state of Lu- 177 (or Hf- 177 for the path along the beta decay) from the 23/2- meta state. **This meta state with a half-life of 160.4 days makes the handling of Lu- 177 very unique.**

Two Implications for Handling Lu-177

There are two implications here. **Firstly, for the unused Lu-177, storage becomes an issue to be considered differently from other radionuclides.** The half-life is already more than 120 days and will have to be categorized as a radioactive waste, because the regulation for "decay in storage" will no longer apply. They must be returned to manufacturers that are licensed to receive unused radioisotopes or to companies that are licensed to dispose of radioactive waste. **It will take around 10 half-lives for the activity to get as low as the background radiation, which amounts to around 4 and a half years for the Lu- 177 meta-state.** This adds to the logistics and cost involved in handling waste "generated."

The second implication is for the radioisotope that has been injected into the body. It means that the decay from the 23/2- state will happen in the body much later after the treatment is over and will continue for months after. The patients become radioactive (low-level radiation) and emit gamma-rays all less than 500 keV (both from the Lu- 177 and Hf- 177 decay paths). **A confusion that could possibly arise with a patient undergoing this procedure is when they encounter law enforcement agents or radiation protection units. The de-exciting gamma ray from the 17/2+ state to the 13/2+ state of Lu-177 is 414 keV, which also corresponds to the gamma-ray found in the decay of Plutonium- 239 (Pu- 239). Since Pu- 239 is a fissile material which is heavily controlled because of its use in nuclear weapons, false alerts may be created in radiation detectors.** The problem can be solved by identifying other gamma-rays that come in coincidence in the level scheme of these separate nuclei – this helps to effectively identify the radionuclide present. Even though the radiation emitted from the patient is low, the fact that it will be detectable for a long time will always be a concern, especially to those around them trying to limit their radiation exposure to As Low As Reasonably Achievable (ALARA). It is a common

HOW NUCLEAR STRUCTURE STUDIES AFFECT THE USE AND HANDLING OF THE MEDICAL RADIOISOTOPE LUTETIUM-177 - *CONTINUED*

practice for doctors to issue discharge instructions or special travel cards to guide the patient's interactions with the general public.

What Then Can Be Done About the Meta State of Lu-177?

What then can be done about the meta state of Lu-177? One answer lies in the reaction used in the production. As I mentioned earlier, there are different reactions which can be used to produce the radioisotope of our choice. One difference in the different reactions will be in the excited states that those reactions populate. Some reactions favor high-spin states, while some favor low-spin states. The (n, gamma) reaction with Lu- 176 used to directly produce Lu-177 usually favors the population of the 23/2- meta state. In that case, there will always be decay from the meta state when direct production is used. Alternatively, if Lu-177 is created indirectly using the (n, gamma) reaction with Ytterbium-176 (Yb- 176), we can populate states below the 23/2- state. The first stage of the reaction yields an unstable Yb- 177, which then beta decays to Lu-177 without populating the 23/2- meta state.

The choice of reaction to use will always depend on the production cross-section of both methods, as there will always be a trade-off between the purity of Lu- 177 and the probability of production. Of course, other nuclear reactions can be studied for the production of pure Lu-177. We can only imagine the numerous possibilities in the near future.

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RUTH E. McBURNEY, CHP HONORED WITH THE JOYCE P. DAVIS MEMORIAL AWARD

by Lisa Bruedigan

At the American Academy of Health Physics Awards Luncheon on July 15, 2025, Ruth McBurney received one of the field's highest honors—the Joyce P. Davis Memorial Award.

Ruth McBurney and Jonathan Walsh, Chair, AAHP Professional Standards and Ethics Committee

This award celebrates the legacy of Joyce P. Davis by recognizing professionals who show unwavering dedication to advancing health physics while upholding the highest ethical standards. Ruth exemplifies these qualities through a career marked by persistence, leadership, and meaningful impact.

While regulatory radiation protection wasn't her original path, it became the space where she could thrive and lead. After facing limited opportunities in the private sector, Ruth found her place in public service—first with the State of Arkansas, then with the State of Texas, and ultimately as a key figure at the Conference of Radiation Control Program Directors (CRCPD). Across each role, she has helped shape policy, guide programs, and enhance the safety and effectiveness of radiation protection nationwide.

Ruth is more than a leader—she's a trailblazer, a mentor, and a role model. Her contributions have opened doors for future generations and strengthened the foundation of health physics as a profession.

We at CRCPD are proud to continue working alongside Ruth and grateful for the impact she continues to make. Please join us in celebrating this well-earned recognition and the incredible career behind it.

IT'S TIME TO ROTATE

by Lisa Bruedigan

Most of you are familiar with the saying,

"To everything there is a season."

That applies to our liaison and committee positions as well. As I've reminded our board members and council chairs, our bylaws require regular rotation—usually every two years.

There's value in having someone serve in a role for a long time; experience creates subject matter experts. But there's also a need to keep our committees fresh with new ideas. Just as importantly, we must engage and grow our newer members, inspiring them to get excited about the important work we do.

I recently came across a quote that resonated with me: "*The secret to growth is helping others grow*." As we make some committee and liaison rotations in the coming months, I encourage you to look for opportunities to help others grow. In doing so, you'll also help strengthen our CRCPD community.

To our long-serving liaisons and committee chairs—thank you for your exceptional contributions. Your dedication has left a lasting mark. We hope you'll continue to share your expertise as an advisor or active member, helping the next chair build on the excellent work you've begun.

IN MEMORIAM

Shanna was a long-time member and leader in the CRCPD, having contributed greatly to progress in radiological safety by using her expertise to serve on the H-7 Committee on Quality Assurance in Diagnostic X-Ray, and to serve on and chair the H-11 Committee on Mammography for many years. As a member of the Mammography Committee, she earned several Board of Directors Outstanding Achievement Awards and a Meritorious Service Award. She was also awarded the James W. Miller Award in 2015 for "significant contributions to national efforts toward the optimization of diagnostic imaging and reduction of unnecessary radiation in the healing arts. She served on and chaired the Mammography Committee, successfully volunteering countless hours toward bettering the awareness of inspectors and technologists alike through training and education. Her dedication and willingness to work through challenges has earned the respect of CRCPD's federal and professional society partners as well as her counterparts in state radiation control programs."

SHANNA FARISH

Shanna Farish, aged 69, loving mother, sister, friend, and radiation control colleague, passed away on May 31, 2025. Shanna was born October 9, 1955, and grew up in the small town of Helper, Utah, the oldest of three children. After high school, she made her way to Weber State University, where she was a proud graduate. From there, she went to work in hospitals and found her passion for radiation.

She found her way to Arizona, raised two boys, and started working for the State of Arizona. She retired from the state radiation control program after a 30-year career but continued working for the State of Montana as a mammography inspector afterward.

Her sons say she was the mother people wished for, and she loved her chosen field of work, inspecting x-ray and mammography facilities and mentoring others who followed her. She was a true leader, and her employees had a great boss!

In addition to her recognition from her work with CRCPD, Shanna was awarded the Leadership in Professional Involvement Award from Weber State University.

From Warren Frier: "To meet Shanna is to know Shanna, she was very up front with everyone she met and respected those who were equally up front with her. Shanna impacted countless individuals in the professional world of Radiation Protection, Safety and Education. Shanna enjoyed humor, and it was a driving and surviving way of life. Always a smile, a laugh and a funny story."

Shanna's celebration of life will be held on October 11, 2025, at Jolie's Place in Chandler, Arizona. Contact for the celebration is katherineC67@yahoo.com. She will be missed by her family, her friends at CRCPD, and all who knew her well.

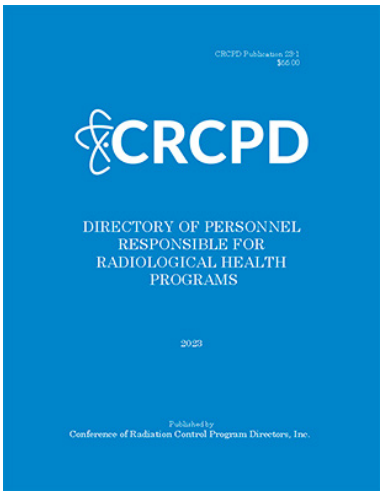
CRCPD WELCOMES NEW MEMBERS

TO APPLY FOR MEMBERSHIP IN CRCPD, SEE THE ONLINE APPLICATION!

Apply Here.

DIRECTORY INFORMATION

The Directory of Personnel Responsible for Radiological Health Programs is available online for members and our federal partners and is updated regularly. Visit CRCPD.



CALL FOR NEWS

CRCPD is interested in what you are doing and would like to share your knowledge and experiences with other CRCPD members through a feature article in the *Newsbrief*.

If you would like to submit an article, please contact Lisa Bruedigan (lbruedigan@crcpd.org) suggesting a topic you'd like to present.

The *Newsbrief* is published six times a year, in even numbered months. Deadline for submission is the 15th of the month of publication.

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