

RADIATION ADVISORY COMMITTEE

Robert Berry, Chair

David Howe, Program Director
Radiation Protection Services

June 11, 2025





TELECONFERENCE PROCEDURES



- Record phone-in number and pass code (in case you lose connectivity)
- Phone-in number and conference ID# provided in Teams invitation email
- If phoning into meeting, use PowerPoint slides to follow meeting
- To unmute self, press *6



- Video (of yourself) is optional
- Please mute your microphones unless speaking
- Use the “raise hand” feature if you have a question
- When speaking, begin by stating your name when you are finished
- RPS staff will use screen share to share PowerPoint information and handouts
- The meeting will be recorded for purposes of accuracy in the minutes

RADIATION ADVISORY COMMITTEE MEETING AGENDA

June 11, 2025 – Hybrid Meeting
800 NE Oregon St., Portland, Oregon
Phone-In Number 1-971-277-2343 ID: 450 342 806#

(* = Action Items)

10:00 a.m. Registration/Public Session

- Call Meeting to Order – Bob Berry, Chair
- Introduction of guests
- Approval of Minutes – Bob Berry, Chair
- RAC Member Expirations (Barb Smith & Dennis Wood)
- RPS Staffing Assignments – David Howe, RPS Program Director

10:30 a.m. 2025 RPS Program Updates – David Howe

- RPS Budget – David Howe, Program Director, RPS
- Electronic/Tanning Products Update – Brent Herring, Lead Worker, RPS
 - IB 2025-02 Pediatric Thyroid Collar/Rectangular Collimation
 - GIS Inspection Mapping Demo – Tom Mynes, Inspector
- Radioactive Materials Licensing – Hillary Haskins, ER/OPS Manager
 - Decommissioning Amendment of TDY/City of Millersburg – Todd Carpenter, Licensing Manager and Erin DeSemples, RML Licensing
- Emergency Response / Incidents – Hillary Haskins
 - Medical Facility Incidents involving misalignment – Michelle Martin, Inspector
 - Decedent Radiation Patient Follow-up – Hillary Haskins
- RPS Training – Hillary Haskins
 - CRCPD Conference
 - ARIO
 - Washington Dept of Health Community Reception Center Dress Rehearsal
 - First Receiver Trainings – Providence Seaside/Adventist Portland/Legacy Emanuel
 - 102nd Civil Support Team Radiation Source Support Training

11:15 a.m. Exemptions/Rules/Statutes – Brent Herring

- New Veterinary Facility Inspection Protocol
- * Qualified Medical Physicist – Not Board Certified
- * OXOS Medical Inc. (updated machine)

11:45 a.m. Lunch

12:15 p.m. Emergency Preparedness/Response

- HSPR Grant – Hillary Haskins
 - New satellite phones purchased
 - New check sources purchased
 - Funding toward Gamma Spec Pre-amp
- Intern Project Update – Robin Holm, RPS Intern
 - Update on Community Reception Center Exercise
 - July 11th
 - Venue/Participants/Exercise Design
 - First Responder/Receiver Training

2:45 p.m. New Business – David Howe

1:30 p.m. PUBLIC COMMENTS:

2:00 p.m. Announcements \ Next meeting scheduled for October 15, 2025 /Adjourn

BREAK

INTRODUCTIONS STAFF AND GUESTS



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APPROVAL OF MINUTES FROM FEBRUARY 12, 2025



Radiation Advisory Committee Meeting



2025 RAC MEMBER EXPIRATIONS

DAVID HOWE

Barb Smith
Second Term 2022-2025

Dennis Wood
First Term 2022-2025

2025 RAC MEMBER TERMS

DAVID HOWE

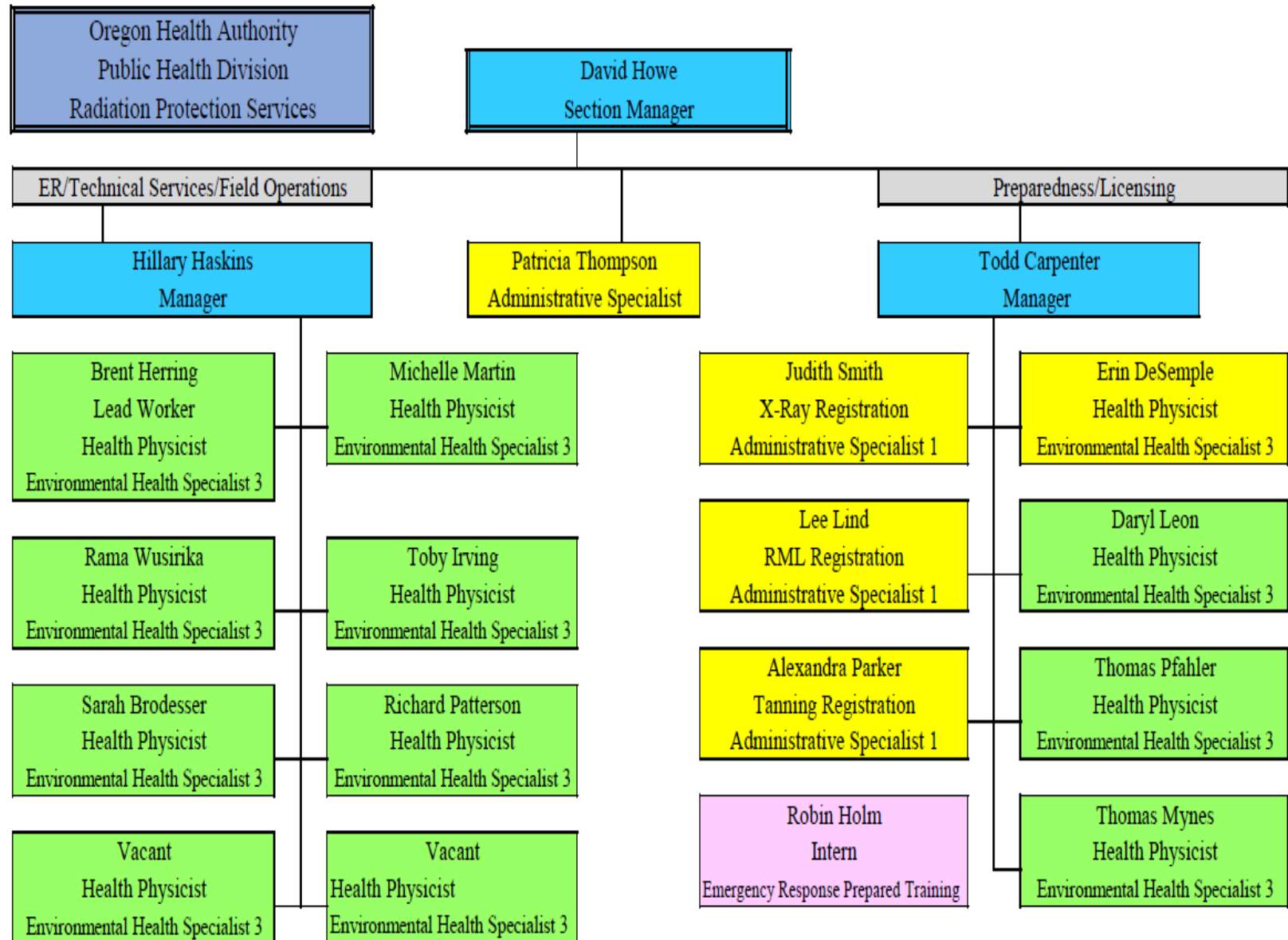
Radiation Advisory Committee Membership 01/01/25

Name	*First Term	Second Term	Third Term	Comments
Zambelli, Alicia	01/01/23-12/31/26			Vice Chair-1 st Term 01/01/25-12/31/26
Berry, Bob	01/01/20-12/31/23	01/01/24-12/31/27		Chair- 1 st term 01/01/25- 12/31/26
Livran, Mechele	01/01/25-12/31/28			
Hamby, David	05/07/20-12/31/23 Replaced M. Krahenbuhl	01/01/24-12/31/27		
Smith, Barbara	07/25/14-12/31/17 Replaced R. Farmer	01/01/18-12/31/21	01/01/22-12/31/25	
Wood, Dennis	01/01/22-12/31/25			
Frey, Garrett	01/01/23-12/31/26			
Sousa Melo, Saulo	04/01/23-12/31/24 Replaced J. Frankel	01/01/25-12/31/28		

*May be partial term due to replacing a member. Bylaws state a member can serve two full terms after the bylaws were adopted.

RPS STAFFING ASSIGNMENTS

DAVID HOWE



2025 RPS PROGRAM UPDATES



RPS BUDGET

DAVID HOWE
PROGRAM DIRECTOR

- Initiation of RPS revenue expense forecast
- 2025 – 2031 (Three biennia) period
- RPS Program Managers Completing Fee Comparison of other Radiation Control Programs and NRC
- Considering additional revenue sources
 - Including Registration Fee Increases, Application Fees, Amendment Fees, Inspection Fees, Late Fees
- Any actions will require Oregon Legislature approval



ELECTRONIC / TANNING PRODUCTS UPDATE

Brent Herring
Lead Inspector





ELECTRONIC PRODUCTS

Brent Herring
Lead X-ray Inspector



X-Ray and Tanning Update

Inspection Update

- Inspection Time – 359 hours
- Inspection Travel Time – 200 hours
- **Inspections since last RAC meeting:**
 - 310 X-ray Inspections (medical, dental, vet, therapy, MQSA, and industrial)
 - 1166 Machines
 - 1185 Tubes
 - 15 Tanning Inspections
- MQSA Audit March 2025 – waiting to hear back

- Other Inspector Duties:
 - Building Tanning and RML Databases
 - Maintaining X-Ray and RML Database
 - Committees – CRCPD, OBMI, etc.
 - Modality Working Groups (CRCPD)
 - Radiation Safety Training Presentations
 - Shielding Documentation Review
 - New Equipment Review
 - Vendor Applications
 - Exemption Reviews
 - Incident Investigations
 - Training Reviews
 - New Machine Inspection Protocols





ELECTRONIC PRODUCTS

Brent Herring
Lead X-ray Inspector



X-Ray and Tanning Update

- Violation Summary:
 - X-ray – 89 citations with 115 instances
 - Machine registration – 25 citations
 - Dosimetry records maintained – 6 citations
 - Training (Dental Hand-Held and Vet Assistant) – 11 citations
- Tanning
 - Time not checked annually for accuracy and Emergency shut-off not test annually





INFORMATIONAL BULLETIN 2025-02

Brent Herring
Lead X-ray Inspector



Pediatric Thyroid Collar Rectangular Collimation

- RPS Released Information Bulletin April 28, 2025
- States pediatric thyroid collars no longer needed if:
 - Rectangular Collimation
 - Digital Sensor





INFORMATIONAL BULLETIN 2025-02

Brent Herring
Lead X-ray Inspector



Public Health Division

Radiation Protection Services



Informational Bulletin 2025-02

April 18, 2025

To: Facilities That Perform Dental Intraoral X-rays on Pediatric Patients

From: David M. Howe, Program Direction, Radiation Protection Services

Subject: OAR 333-106-0325 Exemption-Proposed Revision on Thyroid Shield Use Requirement for Dental Intra-Oral Radiographic Images on Pediatric Patients

The Public Health Division, Radiation Protection Services (RPS) is releasing this informational bulletin regarding a proposal to amend the thyroid shield (collar) use requirement for dental intra-oral X-rays on *pediatric patients* (up to 18 years old).

Background: Thyroid Collar Use for Pediatric Dental Intraoral X-rays:

Current Oregon Administrative Rule (OAR) 333-106-0325(7)(d) states that, "All pediatric patients shall wear a 0.25 lead equivalent thyroid collar to protect the thyroid during intraoral X-ray exposures."

This OAR has been based upon a long-standing National Council on Radiation Protection (NCRP) recommendation to use thyroid collars for all intraoral imaging and extraoral imaging (panoramic and cephalometric) when it does not interfere with the required diagnostic information on the image.

That said, a Journal of American Dental Association (JADA) article, (dated February 1, 2024), opines that there is not a need to use thyroid shielding stating that, "Abdominal and thyroid shielding during diagnostic intraoral, panoramic, cephalometric, and CBCT imaging is no longer recommended, and the use of these forms of protective shielding should be discontinued as routine practice."



INFORMATIONAL BULLETIN 2025-02

Brent Herring
Lead X-ray Inspector



To further reduce radiation dose, the NCRP recommends 1) using rectangular collimation for all intraoral imaging except where patient anatomy or behavior does not allow its use and 2) to use the fastest imaging receptor (plates and sensors) for all intraoral and extraoral imaging.

Proposed OAR Amendment for Thyroid Collar Use During Dental Intraoral X-rays:

In recognition of the above and best practice, effective immediately, RPS is removing (exempting) the pediatric dental X-ray patient thyroid collar requirement with proposed permanent rulemaking, provided that two conditions are met, including:

- 1) the X-ray machine collimator must be rectangular and be used with a position indicating device (PID) for each X-ray exposure.

AND

- 2) the use of rectangular collimation must be paired with a digital receptor.

****** If a rectangular collimator and/or digital receptor is not used, then a pediatric thyroid collar is still required [per OAR 333-106-0325(7)(d)].

For any questions, please contact:

Todd Carpenter, 503-572-8870, todd.s.carpenter@oha.oregon.gov or

Hillary Haskins, 503-891-0541, hillary.k.haskins@oha.oregon.gov

Ref [Informational Bulletins](#)

- 2016-02 [Use of Lead Aprons During Dental X-ray Procedures](#)
- 2024-01 [Rectangular Collimation Use in Intraoral X-rays](#)



ELECTRONIC PRODUCTS

Thomas Mynes
Inspector

GIS Inspection Mapping Demonstration



RADIOACTIVE MATERIALS LICENSING (RML) SUMMARY

Hillary Haskins
Operations Manager



January - May

Action	Count
Inspections Performed	18
Inspections Remaining	53
Licensing Actions Performed	55
Licensing Actions Open	131



DECOMMISSIONING FOR SOIL AMENDMENT AREA

Todd Carpenter
Licensing Manager

Erin DeSemple
RML Licensing



- October 2023 – TDY Industries, LLC requested the release of the Soil Amendment Area (SAA) site from the license where it was listed.
- The SAA site is currently owned by the City of Millersburg, Oregon
- RPS staff have completed a comprehensive review of the TDY information submitted which included:
 - Decommissioning plans submitted
 - *Determining the Decommissioning Group*
 - Data with analysis reviewed (*SAA history of use, maps, surveys/sampling locations with results, survey meter information, site-specific values used for calculations, reasons for decisions made, etc.*)
 - Writing a Technical Evaluation Report from data review
 - Completing an Amendment for the license to remove the SAA site





- A Consent Decree signed in 1996 between TDY Industries, LLC, EPA and the City of Millersburg continues in effect that limits use of the SAA site. Removal of the SAA from TDY's radioactive material license does not relinquish the City of Millersburg from the restrictions set forth in the Decree.
- This decommissioning license amendment was complex and took several months to complete due to the large quantity of information submitted for review.
- The license amendment and decommissioning project will be completed in June 2025.

EMERGENCY RESPONSE / INCIDENTS

HILLARY HASKINS
OPERATIONS MANAGER

Jan-May – Incidents/Response



SEVERAL RAD
WASTE/SCRAP METAL



3 ACCELERATOR
MEDICAL EVENTS



15 OPEN
INVESTIGATIONS

EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



MEDICAL EVENTS- EXTERNAL BEAM RADIATION THERAPY

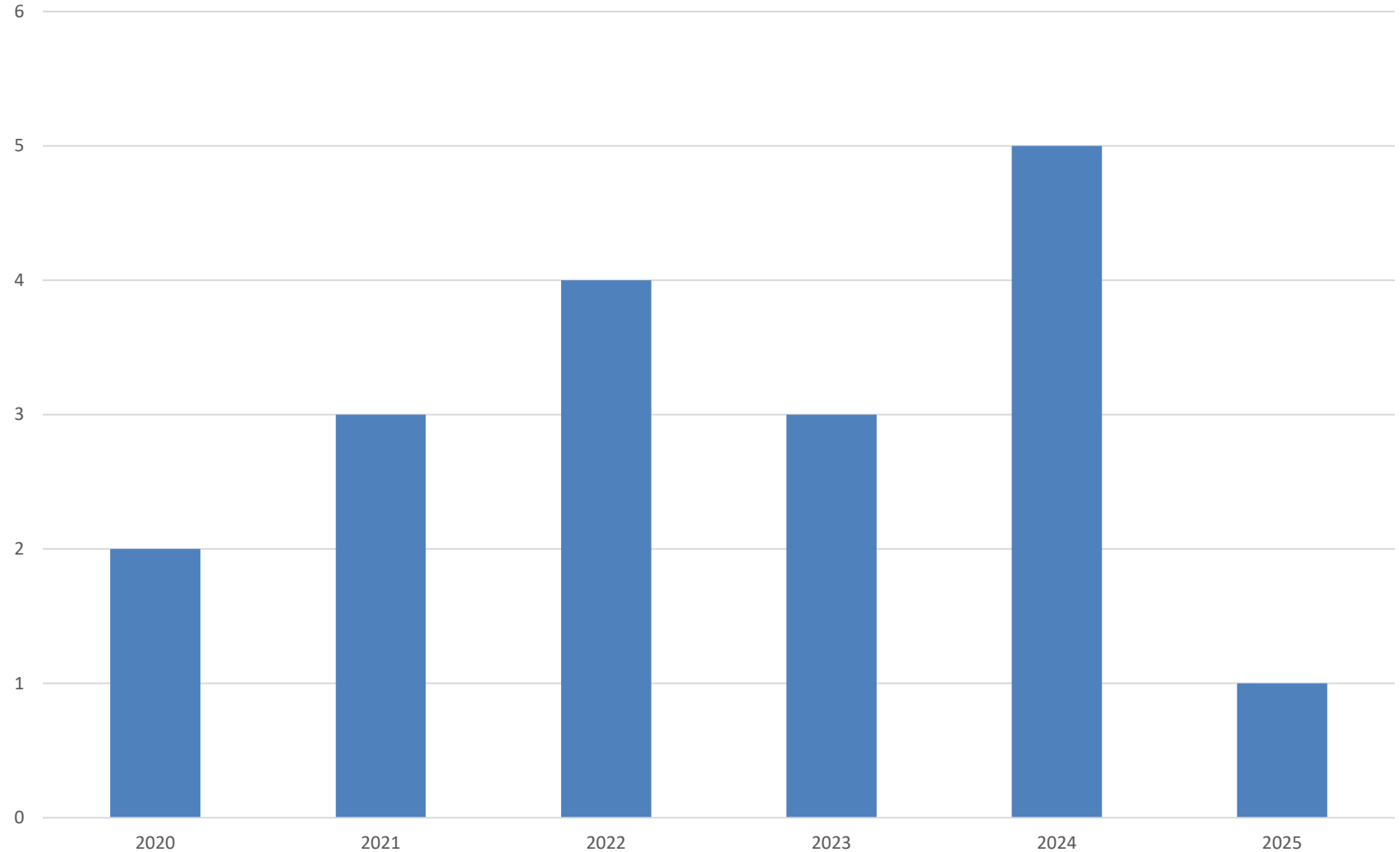


EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



18 External Beam Reportable Events from 2020- 2025



EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Oregon Health Authority
[Public Health Division - Chapter 333](#)
[Division 123](#)
[THERAPEUTIC RADIATION MACHINES](#)

333-123-0020

Reports and Notifications of Unplanned Medical Treatment

(1) A registrant must report any medical treatment event that causes an error in the treatment of a patient. Medical treatment events occur when the administration of an external beam radiation therapy dose:

- (a) Administration results or will result in unintended permanent functional organ damage or physiological injury as determined by a Qualified Radiation Therapy Physician; or
- (b) Involves the wrong patient, wrong treatment modality, or wrong treatment site; or
- (c) Consists of 3 or fewer treatment fractions and the calculated total administered dose differs from the total prescribed dose by more than 10 percent of the total prescribed dose; or
- (d) If the calculated weekly administered dose differs from the weekly prescribed dose by more than 30 percent; or
- (e) If the calculated total administered dose differs from the total prescribed dose by more than 20 percent of the total prescribed dose.



EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Medical Events 2020-2025

18 Medical Events

- Positioning/ Shifts- 14 (80%)
- Wrong treatment plans loaded- 1 (5%)
- Mapping error- 1 (5%)
- CTs incorrectly Labeled-1 (5%)
- Rad Calc Error- 1 (5%)



EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



What is a shift?

Adjustments made to the patient's position based on imaging (ie CBCT) taken before or during treatment

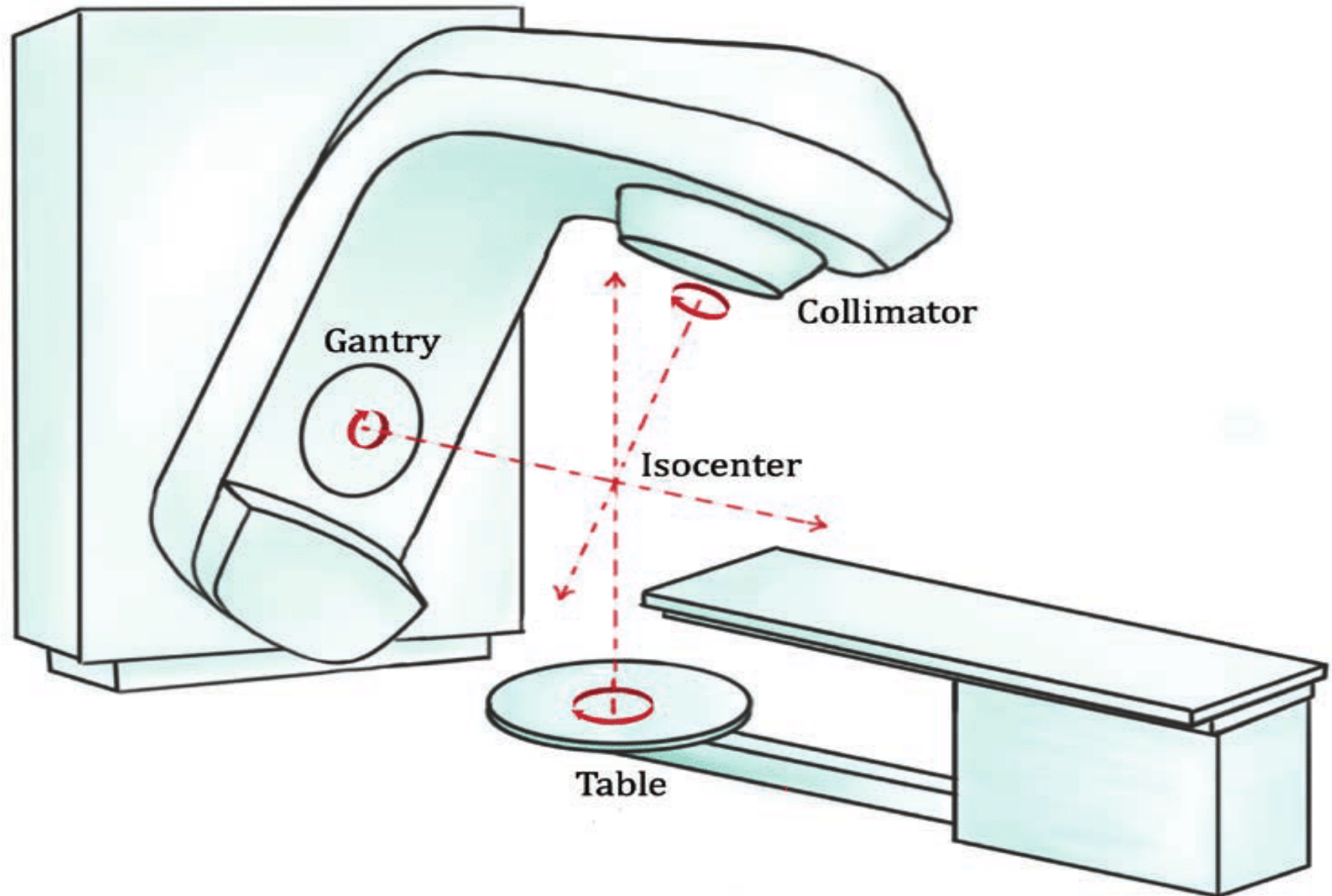
- For example- if a CBCT shows that the tumor is slightly off from the planned position, the therapist may shift the patient by a few millimeters up/down, left/right, in/out to align the target properly with the isocenter

EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



LINAC Isocenter

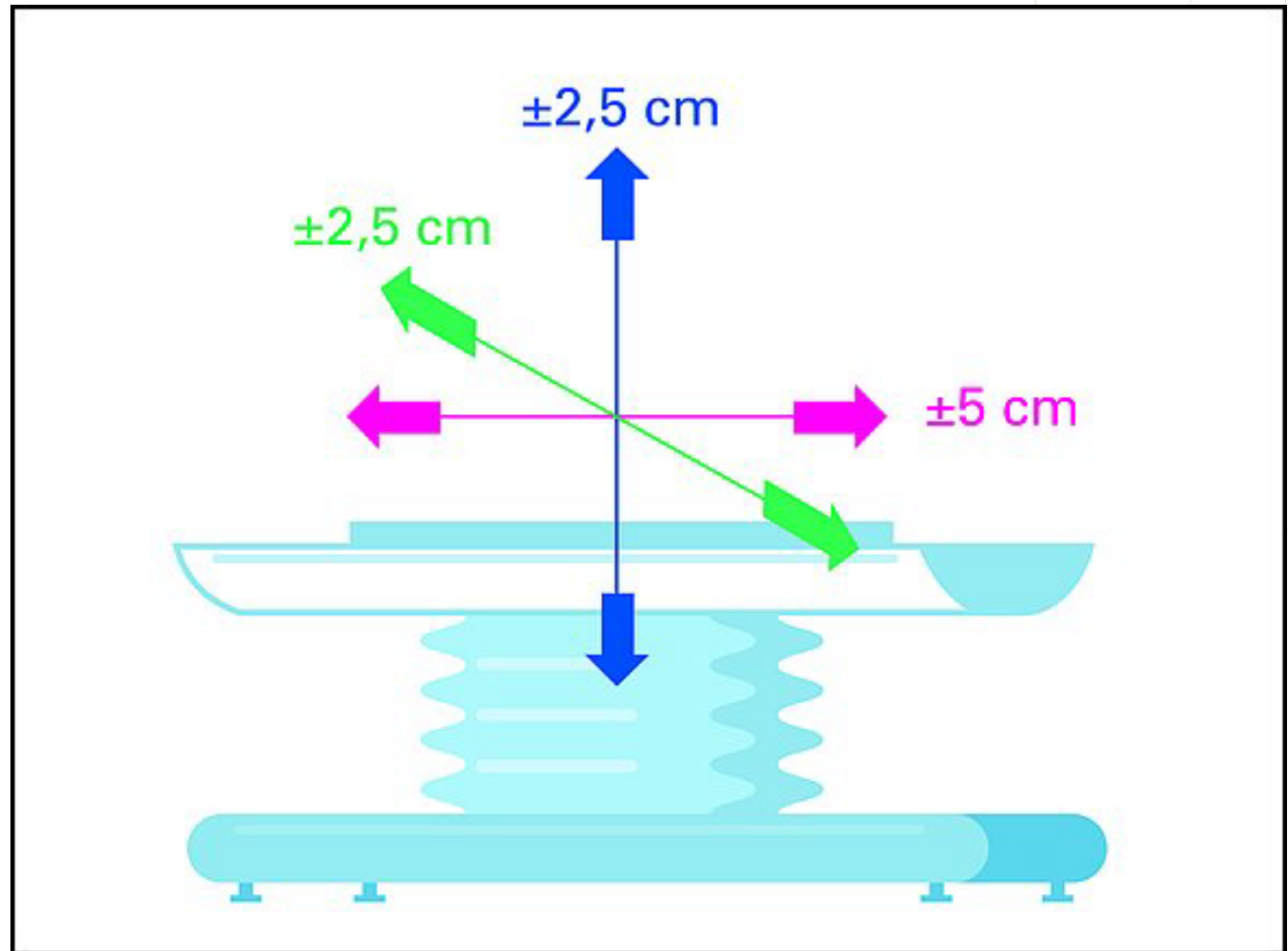


EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist

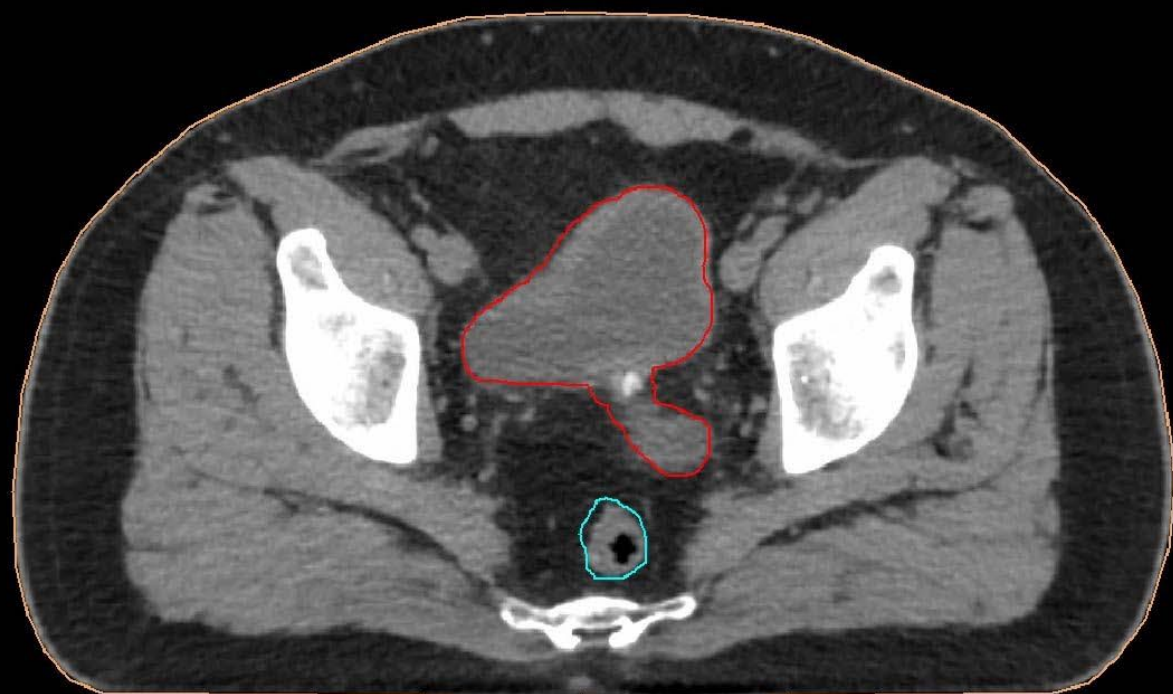


Couch Shifts



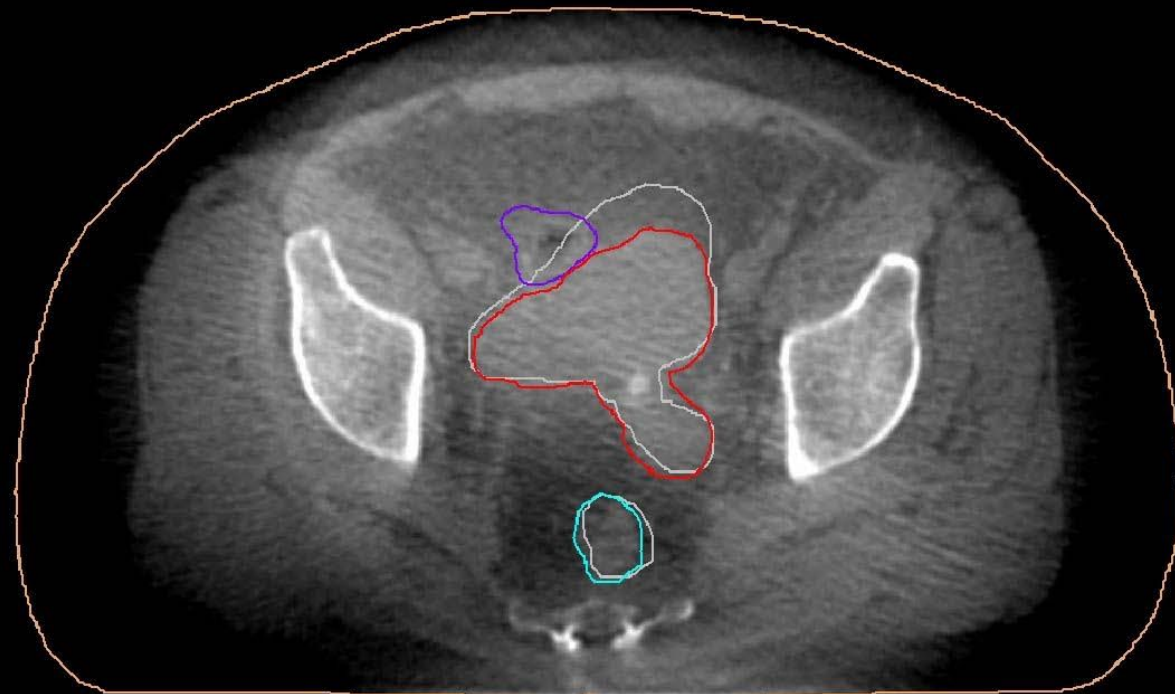
Patient Shift due to tissue movement

Planning-CT



CTV Rectum

Online CBCT with adapted contours



CTV Rectum Bowel Planning-CT contours

EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Causes of Shifts/Positioning Errors

- Moving couch to avoid gantry collision and not moving it back
- Lining up to incorrect/healed scars (not using tattoos)
- Selecting wrong CT image (CT Sim vs CBCT) at LINAC console
- Moving couch wrong direction (+15 vs -15)
- Double application of shifts
- Loading wrong treatment plans (previous plan not current plan)
- Aligning to incorrect anatomical site (structures not clear on CBCT)

EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Facility Corrective Actions

- Second therapist verification of shifts
- Additional approvals (dosimetrist, physicist, lead therapist)
- Policies to re-image if shift > 2cm
- Approving plan changes in sequence (Dosimetry, Medical physicist, RT) not in parallel
- Modifying error messages to reduce notification fatigue

EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Root cause

- New therapists/ therapists returning after extended leave
 - Inadequate training/refresher training
- Excessive workload
 - Ignoring error messages
 - Approving plans in parallel
 - Radiation oncologists not approving first treatment image
- Tattoos- patients resistant to tattoos/marks on body
- Poor/inadequate imaging
 - CBCT not clearly showing structures



EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Technological Advancements

Surface Guided Radiation Therapy

- Uses multiple cameras to create a 3D model of the patient's skin surface
 - Aligns patient with treatment isocenter before start of treatment
 - Tracks patient's position and movement during treatment (can pause treatment if patient moves)
 - Tattoos are not needed
 - Deviations from intended position are projected onto patient's skin allowing for corrections
 - Supports breath hold techniques
 - Reduction in number of CBCT scans needed (reducing dose)

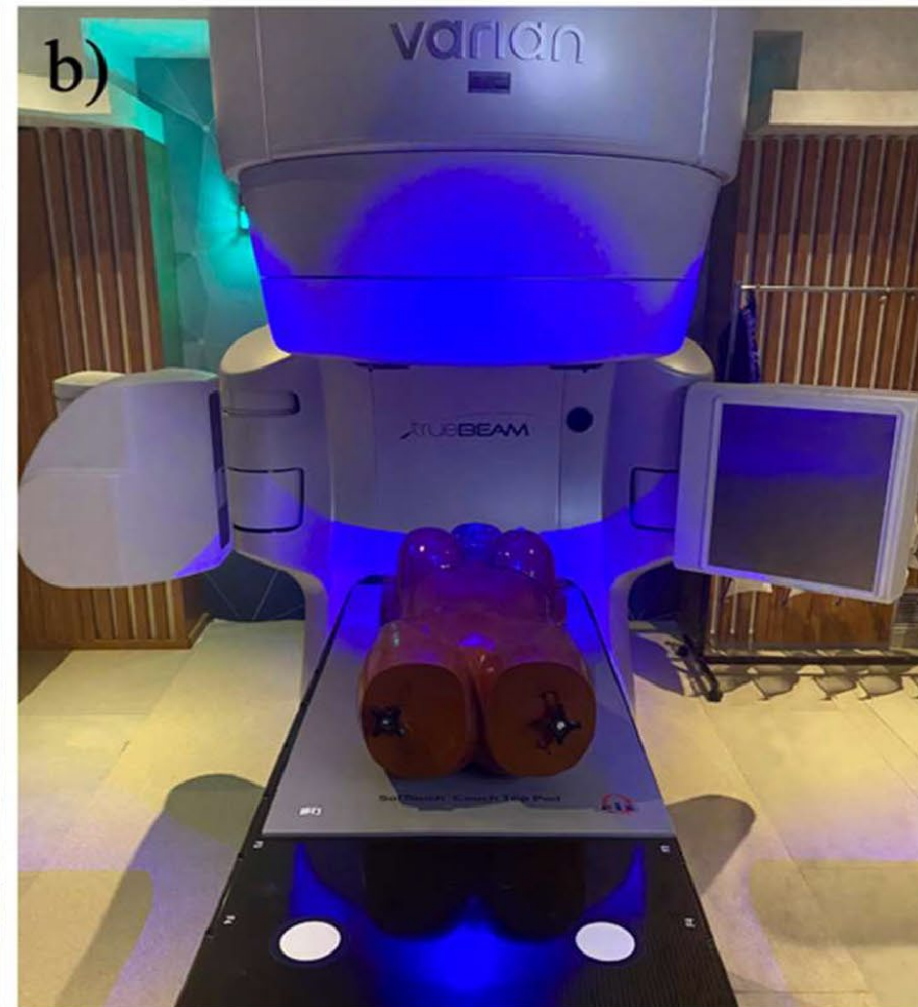
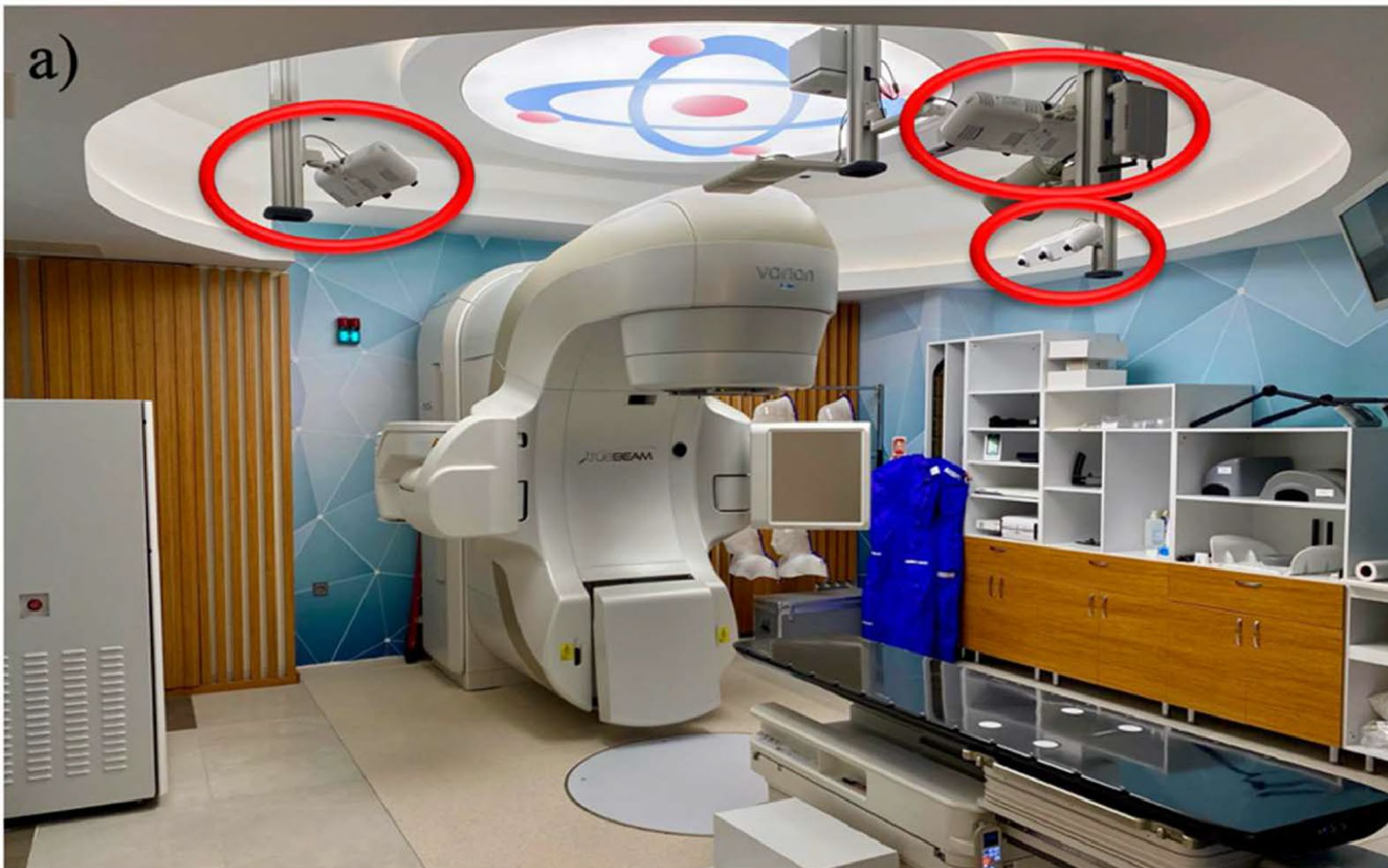
Common SGRT Systems:

- Vision RT (AlignRT)
- C-Rad
- Varian IDENTIFY



Surface Guided Radiation Therapy

(Varian Identify)



EMERGENCY RESPONSE/ INCIDENTS

Michelle Martin
Health Physicist



Michelle Martin
Radiation Protection Services

Michelle.L.Martin@oha.oregon.gov

503-891-0260



EMERGENCY RESPONSE/ INCIDENTS

Hillary Haskins
Operations Manager



Deceased Individuals Remains Handling Post Lu-177 Therapy

- 2 incidents 2023-2024
 - Patient passed within 24 hours of treatment
 - Working knowledge with Dr. Hamby, 24 hours and a biological half-life of about 28 hrs
 - Patient passed 5 days after treatment
 - 207 mCi at 1047 on 8/1/24, passed on 8/5/24
 - Eff $\frac{1}{2}$ life: 8/1-8/5: 12.93 mCi
 - Phys $\frac{1}{2}$ life: 8/5-8/9: ~8.4 mCi remaining
 - Actual dose reading 8/9
 - double shrouded over liver at ~0.5 inches from body 0.83 mR.
 - unshrouded over liver at ~0.5 inches from body 1.7 mR.
 - 8/28 - Various containers for cremains 1-2.5 mR
 - Final assessment, Aluminum Urn
 - 2.02 mR/hr contact of Urn
 - 1.10 uR/hr @ 33 cm
 - ~ 0 @ 1 meter



EMERGENCY RESPONSE/ INCIDENTS

Hillary Haskins
Operations Manager



Lu-177 Effective Half-Life

Tissue	% collected	Bio ½ life
Bone	60%	3500 days
Liver	2%	3500 days
Kidneys	0.5%	10 days

Time after admin.	Effective half-life
0–24 h (early phase)	1.28 h (0.93–1.52 h)
24–168 h (late phase)	49.5 h (45.1–56.6 h)

- Lutathera
 - 1% Lu-177m 160-day ½ life
 - Decay-in-storage < 120-day ½ life



EMERGENCY RESPONSE/ INCIDENTS

Hillary Haskins
Operations Manager



Emergency Response Dry Creek Landfill Event Mitigation

Misidentified as:

- Plutonium
- Am-241
- Mn-54
- Cr-51
- Co-57



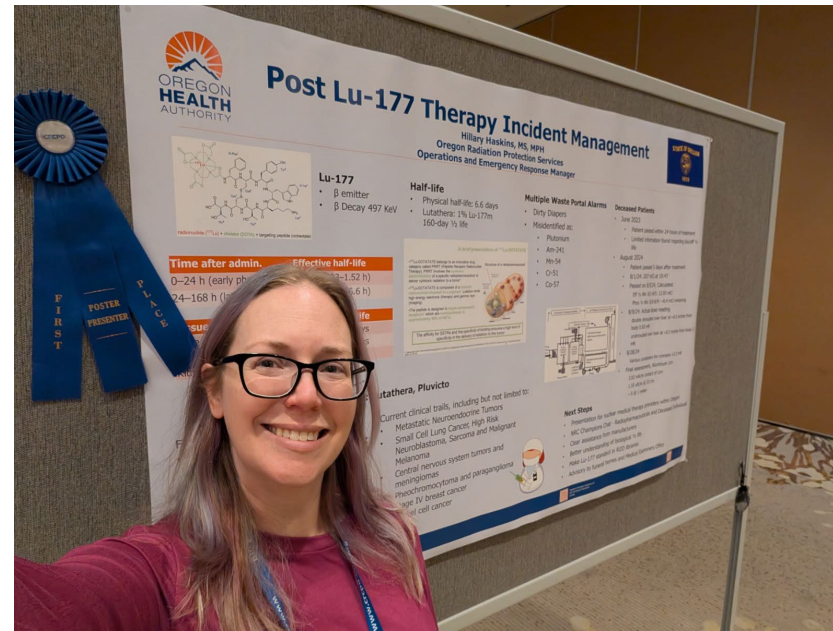
TRAINING AND CONFERENCES

HILLARY HASKINS
OPERATIONS MANAGER

March 2-8 th	DHS/FEMA Advanced Radiological Incident Operations (ARIO)
April 25-26 th	Washington Department of Health Community Reception Center dress rehearsal
May 16 -17 th	CRCPD National Conference MQSA Training
May 19 – 25 th	CRCPD National Conference
May 20 th	102 nd CST Radiation Source Support Training
May 28 th	First Receiver Training at Legacy Emanuel (for all Legacy hospitals)
May 29 th	First Receiver Training at Adventist Portland
May 31 st	Washington Department of Health Community Reception Center evaluated drill
June 11 th	First Receiver Training at Providence Seaside

Conference of Radiation Control Program Directors (CRCPD) Annual Meeting

- Hillary Haskins
Operations/Emergency Response Manager
CRCPD Board Member
- Brent Herring
X-ray & Tanning Lead
BGRT Presentation
- Tom Mynes
Health Physicist
Whole Body Imaging work group



Conference of Radiation Control Program Directors (CRCPD) Annual Meeting

- Brent Herring
X-ray & Tanning Lead
MQSA
- Toby Irving
Health Physicist
MQSA
- Michelle Martin
Health Physicist
MQSA



A photograph of a white ceramic mug filled with a frothy coffee beverage, sitting on a light-colored speckled countertop. A soft, warm light source from the upper left creates a bright, circular glow on the surface behind the mug and casts a gentle shadow to its right. The text "Take a Break" is written in a clean, white, sans-serif font across the lower-left portion of the image.

Take a Break



Exemptions/Rules/Statutes

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

New Veterinary Facility Inspection Protocol

- RPS approved new inspection protocol beginning of 2025 (14 pages)
- Includes protocols on all imaging equipment that could be found during inspections
 - Fixed, mobile, and portable x-ray
 - Fixed, mobile, and portable dental
 - Fluoroscopy
 - Computed tomography

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

Title: Inspection of Veterinary Facilities

No. 357

Effective Date: 01/03/2025

Approved by:	Date
Program Director <i>[Signature]</i>	03/14/2025
Program Manager <i>[Signature]</i> Hillary Haskins	3/5/25

Prepared by

Document Author(s)	Date
Brent Herring	01/03/2025

Reviewed or Revised By

Review	Revised	Date	Author	Brief Change Description

Radiation Protection Services, at its option, may change, delete, suspend, or discontinue parts or the protocol in its entirety.

Authority

Oregon Health Authority (OHA), Public Health Division (PHD), Center for Health Protection (CHP),
Radiation Protection Services (RPS)

Reference

Oregon Administrative Rules (OAR), Chapter 333, Division 100
Oregon Administrative Rules (OAR), Chapter 333, Division 101
Oregon Administrative Rules (OAR), Chapter 333, Division 106
Oregon Administrative Rules (OAR), Chapter 333, Division 120
Protocols 332, 334, 352

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

Objective

To provide RPS X-ray inspectors with a standardized process for conducting inspections of veterinary facilities.

Guidelines

1. Be flexible for unannounced inspections.
2. Be aware of facilities workload and complete work in an efficient manner.
3. Check database and I: Drive for possible facility exemptions.
 - a. I:Drive-> RAD -> RPS Exemptions -> Exemption Requests (Excel)
4. Most veterinary facilities have different types of machines (X-ray, Dental, Fluoroscopy, and Computed Tomography). Review inventory and be sure you are approved to inspect these machines.

Equipment

1. Illumination test strip, glow board, pennies, and/or plastic grid
2. Timer
3. Thermometer
4. Tape measure
5. Radcal X-ray detector
6. Health division State RAD ID stickers
7. Copies of applicable RPS rules
8. Copies of all attachments

Attachments

1. Notice to Employees
2. X-ray/Light Field Penny Test Guidance
3. Table 4 – Half-Value Layer (HVL) Criteria

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

Protocol

1) Inventory and Machines

- a) Review inventory and machines before inspection. If an inspector has not been signed off on certain machines, then they should not be inspecting the facility.

2) Exemptions

- a) Review exemption checklist on the I:Drive for possible facility exemption. Most exemptions involve fluoroscopy (fluoro) and computer tomography (CT).

3) Inspection Procedures

- a) For fixed radiographic machines, portable radiographic machines, and mobile panoramic (pano) machines (new technology).

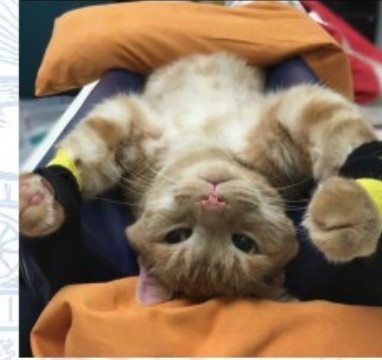


EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

24) Restraining Devices

- a) Verify the presence and use of animal restraining devices. Examples of restraining devices can be sponges, sandbags, collars, feline clamps, etc.



- b) Veterinary personnel tend to be holders more frequently as compared to other x-ray registrants. Be sure to have discussion with staff about the use of animal restraining devices.

25) Images

- a) Review images for evidence of human anatomy (hands, fingers, etc.) in images. If human anatomy is found in radiographs, then a discussion concerning importance of restraining devices and operator ALARA is needed. 333-106-0601(3)(c)

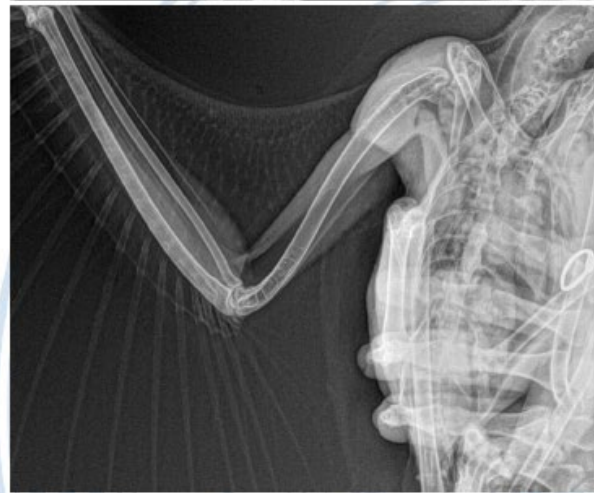
EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

i) Examples:



This radiograph shows an animal being restrained by a human holder. Notice the ring on the right hand.



This radiograph shows a human restraining a bird with their hand over the chest and abdomen. Notice the ring on finger.

ii)



This radiograph shows two hands restraining a bird on each side. Notice the rings on each hand.

iii)

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

Qualified Medical Physicist – Not Board-Certified Request

- Request to have a non board certified (ABR) physicist approved
 - With general supervision (outside of building)
- Facility states inability to find a certified physicists
- Currently a nationwide shortage
- Previous request was denied last year
- This request was also denied

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

OXOS Medical Inc. (Updated Machine/Model)

- Previous Machine/Model
 - Had X-ray and fluoroscopy modes with hand-held option
 - Machine denied for sale and use in Oregon
- Current Machine/Model (MC2)
 - Has X-ray and fluoroscopy modes
 - X-ray – operable in hand-held and fixed mode
 - Fluoroscopy – only operable in fixed modes
 - Will not replace a fixed model
 - Not approved (FDA) to be used in operating room/settings
 - For Extremities Only
 - Mid-humerus down
 - Knee down
 - Manual tech chart lists other body parts
 - They will need to update



EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

OXOS – Technology Surpasses RPS Rules

- Machine Specifications -
 - Docked mode only performs vertical and horizontal
 - No light field
 - Screen on Hand-Held device represents the light field
 - **Exemption**
 - No true collimation (no knobs)
 - Uses Sensors and receptors
 - Uses multiple pucks for smaller collimations
 - **Exemption**
 - Maximum X-Ray Field is 9 in X 9 in
 - Normally is 14 in X 17 in
 - No spacer cone for fluoroscopy
 - Spacer cone used so SSD does not go below 11 inches
 - Machine will not expose if SSD is below 11 inches
 - **Exemption**





LUNCHTIME



EMERGENCY PREPAREDNESS/RESPONSE

EMERGENCY PREPAREDNESS/ RESPONSE

HILLARY HASKINS

HSPR Grant

- 3 new satellite phones
 - Iridium Extreme 9575
 - US phone numbers
- New check sources purchased
- ROSS course for 2 RPS Staff – Canceled
- Remaining funds being used for Gamma Spec Pre-Amp diagnostic



Radiation Advisory Committee (RAC)



Robin Holm, BS (soon MS DPEM)
Oregon Radiation Protection Services
Internship projects
November 2024-June 2025
240 hours +

About me – background

22 years – incident and emergency management

35 years – training people

Hospital Preparedness Program (HPP) Regional Emergency Coordinator (REC) for OHA's Health Security, Preparedness, and Response program

Oregon Disaster Medical Team, Planning Section Chief (PSC)
Regional Multi-Agency Coordination System and Group – leadership

Homeland Security Exercise and Evaluation Program (HSEEP) Master Exercise Practitioner (MEP)

Equity advocate and planner

Many years volunteering for organizations serving vulnerable populations



My radiation background

- 2007 (2019 update): Multnomah County Health Department's "Radiation Screening and Community Reception Center (CRC) Response Plan"
- 2007: Lead county planner for "TOPOFF IV" exercise
- 2019: Exercise Director for "FBI-CDC Rad Workshop"
- 2023: Developed health care coalition "Radiation Emergency Surge Annex"
- 2023: Exercise Director for "RADical Surge Tabletop Exercise Series"
- 2024: Planner for regional "RADopoly" exercise
- Coordinated CBRNE training, hospital decon training over the years

Internship Projects



Learning and
research



Update 1st
Responder
Training



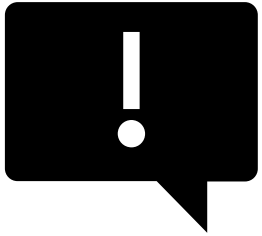
Develop 1st
Receiver
(hospital)
Training



Community
Reception
Center Full-
Scale Exercise



Community
Reception
Center Toolkit



Base these efforts on core values

- ODHS/OHA Writing Style Guide (ODHS/OHA, 2024)
- Anti-racist, strength-based language
- Accessibility and color guides

Learning and Research

AWR-923W
Radiation
Emergency
Management

24-hr
HAZWOPER

Metro
Hazardous
Waste training

Shadow
inspector

RPS staff
meetings,
trainings

WA DOH EWAC
dress rehearsal,
training

Web and other
resources

Training

Update: Radiation Emergency Training for 1st Responders

Develop: Radiation Emergency Training for 1st Receivers (hospitals)

Final products

- Slides
- Lesson plan
- Coordinate scheduling training with hospitals

1st Responder Training - Highlights

- Radiation basics
- Measurements, dose, exposure limits, risks
- Protecting 1st responders
- Patient care and handling
- Package labels and placards
- Nuclear transportation accidents



1st Receiver Training – Highlights

- Radiation basics
- Measurements, dosimetry, detection equipment
- Acute Radiation Syndrome, Cutaneous Radiation Injury
- Protecting 1st receivers
- Patient care and handling
- Prepare for patients arriving by ambulance
- Prepare for large numbers and “worried well”
- Patient assessment and treatment
- Handling radioactive waste



Lesson Plan

Course Title: Radiological Emergency Response Training for First Responders

Accessibility: For interpreters, alternate formats, or other language access needs, visit [Language Access Services](#) (on the OWL). Submit requests as soon as possible. Ensure that meeting spaces, including entry and restrooms, are ADA accessible. Ensure there is ample room for interpreters, people using mobility aids, and service animals. Ensure the meeting space has good lighting and acoustics.

Purpose:	Provide first responders information on radiological hazards and how to identify a radiological incident, in order to protect themselves and protect the public.
Course Length:	3.0-4.0 hours
Prerequisites:	None, however, the intended audience are fire, police, and EMS service members

Community Reception Center (CRC) Exercise



1 day Full-Scale Exercise (1/2 day didactic, 1/2 day exercise)



Scenario: Cesium-137



Portland Community College, Rock Creek



Date: July 16

CRC Exercise Participating Organizations

- Six counties: Clackamas, Columbia, Multnomah, Washington, Umatilla, Yamhill
- Three regional HAZMAT teams: HM7 (Portland), HM9 (Tualatin Valley) HM10 (Hermiston)
- State Agencies:
 - RPS
 - OHA HSPR, Oregon Department of Human Services
 - 102 Civil Support Team (CST) ORARNG
 - Oregon Department of Emergency Management
 - WA State Emergency Management, WA DOH Office of Radiation Services
- NW Oregon Health Preparedness Organization staff
- Cities Readiness Initiative
- Oregon Burn Center (at Legacy)
- Red Cross
- Portland Community College – Emergency Management, Fire, Public Safety, Veterinary Services, students
- Observers

Exercise Objectives (summarized)

- Radiation basics, what happens at the scene, burns
- Stations and operation of a CRC
- Contamination screening/survey equipment
- Registration process
- Safety procedures

Emphasis on training local jurisdictions



Oregon Radiation Protection Services Community Reception Center Toolkit

[May 16, 2025] - - -DRAFT - - -

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CRC Toolkit

Provides information, resources, and templates that local jurisdictions can use or adapt to support the operation of a CRC.

Background info and importance of self-decontamination

Practical considerations and planning assumptions

Concept of Operations:

- Site selection, objectives
- Process flow, zones, positions, job action sheets
- Equipment/supply list
- Worker protection
- Waste management
- Etc.

References

- Center for Domestic Preparedness (CDP, n.d.). *REP Radiological Emergency Response Operations (RERO)*. FEMA.
<https://cdp.dhs.gov/training/course/PER-904>
- Oregon Department of Human Services and Oregon Health Authority (ODHS/OHA). (2024, Aug). *ODHS and OHA Writing Style Guide*.
<https://sharedsystems.dhsoha.state.or.us/dhsforms/served/me9412.pdf>

You can get this document in other languages, large print, braille or a format you prefer free of charge. Contact Patricia Thompson at patricia.a.thompson@oha.oregon.gov or call (971) 673-0490. We accept all relay calls.

Radiological Protection Services

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NEW BUSINESS

DAVID HOWE
PROGRAM DIRECTOR



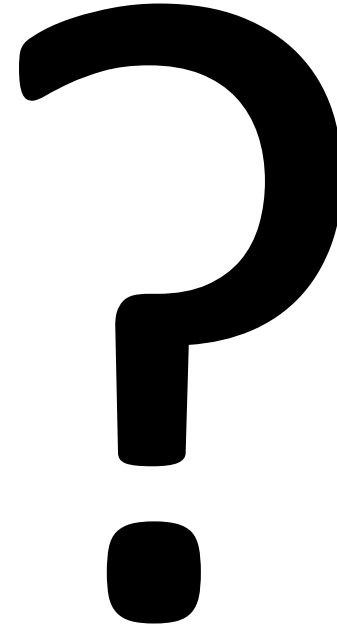
- 2025 Upcoming Mandatory Radiation Advisory Committee Member Training



PUBLIC COMMENTS

RAC MEMBER PARKING LOT

DAVID HOWE
PROGRAM DIRECTOR





THANK YOU FOR ATTENDING
Next Radiation Advisory Committee Meeting:
October 15, 2025