

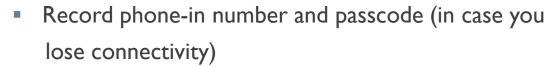
RADIATION ADVISORY COMMITTEE

BARBARA SMITH, CHAIR

David Howe, Radiation Protection Services Program Director

October 11, 2023







- Phone-in number and conference ID# provided in Teams invitation mail
- If phoning into meeting, use PowerPoint slides to follow meeting
- To unmute self, press *6



- Video (of yourself) is optional
- Please mute microphone unless speaking
- Use the "raise hand" feature if you have a question



- When speaking, begin by stating your name
- RPS staff will use screen share to share PowerPoint information and handouts
- The meeting will be recorded for purposes of accuracy in the minutes

TELECONFERENCING PROCEDURES



RADIATION ADVISORY COMMITTEE MEETING AGENDA

October 11, 2023 - Hybrid Virtual Meeting

800 NE Oregon St., Room 368, Portland, Oregon

Phone-In Number 1-971-277-2343 Code: 202 652 420#

(* = Action Items)

10:00 a.m. Registration/Public Session

- > Call Meeting to Order Barb Smith, Chair
- Introduction of Guests
- *Approval of Minutes Barb Smith
- ➤ *Nomination/submission of 2 RAC Members for 2024-2027 Terms
 - o David Hamby and Robert Berry
- NRC/RPS Intern (Mary Casto) David Howe/Hillary Haskins

10:30 a.m. 2023 RPS Program Updates - David Howe

- RPS Budget Todd Carpenter, Licensing Manager, RPS
- Electronic / Tanning Products Update Brent Herring, Lead Worker, RPS
 - o X-ray Detectors (RadCals) & Lumbar Phantoms
- Radioactive Materials Licensing Hillary Haskins, Operations Manager, and Todd Carpenter RPS
 - IMPEP (Feb 2024)
- Emergency Response / Incidents Hillary Haskins
 - o Year-To-Date Number of Incidents
 - o Medical Waste Disposal
- ➤ RPS Training Hillary Haskins
 - Organization of Agreement States Annual Meeting in Seattle David Howe & Hillary Haskins
 - o REP Executive Course in Monterey, Ca Hillary Haskins & Todd Carpenter
 - o Civil Support Team with Army North Evaluated Drill Hillary Haskins & Dong Lim
 - o RPS Training Calendar Events





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

- Year-To-Date Number of Exemptions
- Salem Hospital Biology Guided Radiotherapy (BGRT) Machine Operator Rules Daryl Leon
- Clear Choice Dermatology Superficial Electronic Brachytherapy Machine Operation Update
- Clinic of Dermatology & Wellness -Superficial Electronic Brachytherapy Machine Use Approval
- New Vendor Application for Medical Physicist (pre 2007 experience) no accreditation required
- Go Health Facility Exemption Violation & Corrective Action
- Direct vs. Personal Supervision of Radiologic Technologist's by Radiologists/Non-Radiologist Practitioners with Fluoroscopy Training
- > Tanning Vendor Installer Licensed Electrician Requirement Clarification

11:45 a.m. Lunch

12:15 p.m. Emergency Preparedness/Response – Hillary Haskins

- Puget Sound Naval Shipyard Nuclear Core Compartment Inspection and Tour Hillary Haskins
- ➤ Civil Support Team Evaluated Drill (9/27/23)
- RIID Acquisition & New Personal Electronic Dosimetry Pending
- > Civil Support Team/FBI/Hazmat Vehicle Rollover Scenario Drill
- > Fukushima Tritium Release into the Pacific Ocean

12:45 p.m. New Business

1:30 p.m. PUBLIC COMMENTS:

2:00 p.m. Announcements \\ Next Meeting Scheduled for February 14, 2024 /Adjourn











NOMINATION OF (2) RAC MEMBERS FOR 2024-2027 TERM



RADIATION ADVISORY COMMITTEE MEMBERSHIP 01/01/2023

Name	*First Term	Second Term	Third Term	Comments
Zambelli, Alicia	01/01/23-12/31/26			
Berry, Bob	01/01/20-12/31/23			Vice Chair- 1st term 01/01/23- 12/31/24
Henrikson, Mandy	01/01/17-12/31/20	01/01/21-12/31/24		
Hamby, David	05/07/20-12/31/23 Replaced M. Krahenbuhl			
Smith, Barbara	07/25/14-12/31/17 Replaced R. Farmer	01/01/18-12/31/21	01/01/22-12/31/25	Chairperson-2 nd term 01/01/23-12/31/24
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			

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



2024 RAC MEMBER NOMINEES

<u>David Hamby</u> – OSU Emeritus in Health Physics & Nuclear Engineer Renaissance Code Development

Robert Berry – Nuclear Medicine Lead & Radiation Safety Officer at Providence Portland Medical Center and East Portland







NRC/RPS INTERNSHIP – WELCOME MARY CASTO

Mary Casto is from Cincinnati, Ohio. She earned her B.S. in Environmental Science from The Ohio State University. Mary is an active member and leader in her church and is an admirer of nature, particularly trees. Before joining the NRC Mary was an AmeriCorps member on an emergency planning and

Geographic Information System (GIS) team which made her interested in a career in the federal government. She also volunteered with the American Red Cross dispatching Disaster Action Teams and coordinating the response to disasters in central and southern Ohio. She joined the NRC as an intern in May 2021 in the Reactor Licensing Branch in the Office of Nuclear Security and Incident Response which performs emergency preparedness reviews for new and existing reactors. After the summer, she worked part-time as a student co-op while finishing her degree and then joined the Nuclear Regulator Apprenticeship Network cohort in July 2022. Her first apprenticeship was with the Materials Inspection Branch in Region III where she went on inspections, worked on IMC 1248 Appendix B qualification, audited allegation processes and participated in the enforcement process. Her second apprenticeship is as an Environmental Technical Reviewer in the Environmental New Reactors Branch, a part of the Environmental Center of Expertise, in the Office of Nuclear Materials, Safety, and Safeguards. She has been reviewing the ecology and land use sections of environmental reports for new reactors and preparing tribal letters. Mary continues to work towards IMC 1248 Appendix B materials inspector qualification.





RPS BUDGET

Todd Carpenter, Licensing
Manager RPS



RPS FISCAL BUDGET JULY 1, 2022 THROUGH JUNE 30, 2023

6/30/2023		Payroll WD	Payroll ePay					
Grant Title	Budget Period	Beginning Balance	Revenue AY23/Budget	Accrued Revenue	Expenditure	Remaining Balance	% Spent	% Budget Period
RPS Grain Analysis Lab Fee	7/1/2021-6/30/2023	(1,132)	10,888		19,894	(10,138)	183%	100%
RPS X-Ray Registration Fee	7/1/2021-6/30/2023	74	3,339,227		3,401,888	(62,586)	102%	100%
RPS Radioactive Materials License (RML)	7/1/2021-6/30/2023	(179,213)	2,256,304		2,233,725	(156,634)	99%	100%
RPS Tanning Device Registration	7/1/2021-6/30/2023	59,967	393,559	10,580	262,773	190,753	67%	100%
RPS DEQ School Disposal	7/1/2021-6/30/2023	1,922	-	-	-	1,922	-	88%
RPS DOE First Responder Training	7/1/2021-6/30/2023	19,249	20,000		7,039	32,210	35%	100%
RPS Metro Rad Mat Disposal	1/1/2021-12/31/2022	70,353	18,400		5,319	83,434	29%	100%
RPS DOE Emergency Response Training	7/1/2019-6/30/2023	(7,824)	112,000	-	141,042	(36,866)	126%	100%
RPS Mammography Fac Inspection PH23	7/1/2022-6/30/2023		277,992	-	65,108	212,884	23%	100%
RPS Mammography Fac Inspection PH22	5/1/2021-6/30/2022	243,568	289,755	-	330,479	202,843	114%	100%
	Total Of		6,139,490	10,580	6,051,786	52,232		
	Total GI		-	-	-	-		
	Total FF	•	567,747	-	395,587	415,728		
	Total All Funds	208,096	6,707,237	10,580	6,447,373	467,960		





- Inspection Update
 - Inspections since last RAC meeting:
 - 347 X-ray Inspections (medical, dental, vet, therapy, MQSA, and industrial)
 - 1234 Machines
 - 1241 Tubes
 - 16 Tanning Inspections
 - Violation Summary:
 - X-ray
 - Machine registration and dental operators must complete machine specific applications training
 - Tanning
 - Time not checked annually for accuracy and Emergency shut-off not test annually

ELECTRONIC / TANNING INSPECTION UPDATE

Brent Herring, Lead Worker, RPS

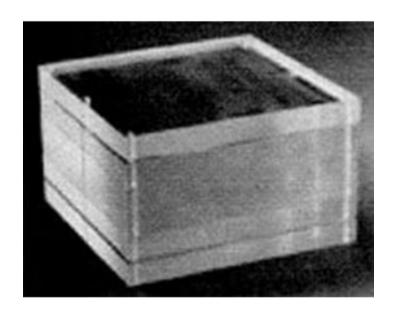


NEW X-RAY DETECTORS & LUMBAR PHANTOMS

X-Ray Detectors
10 new RadCals



<u>Lumbar Phantoms</u> 8 new lumbar phantoms







RML PROGRAM UPDATE

RML Activity June 01 – September 30, 2023

Description	Count
Inspections	40
Closed Licensing Actions	11
Closed Incidents	21
Open Incidents	13

Hillary Haskins,
Operations Manager, RPS



Stolen Portable Gauge

- June 6, 2023
- Truck stolen off job site in Portland with gauge in back
- Recovered by Salem Sheriffs Office

Damaged Portable Gauge

- July 7, 2023
- Gauge struck by onsite construction vehicle
- No spread of contamination or injuries

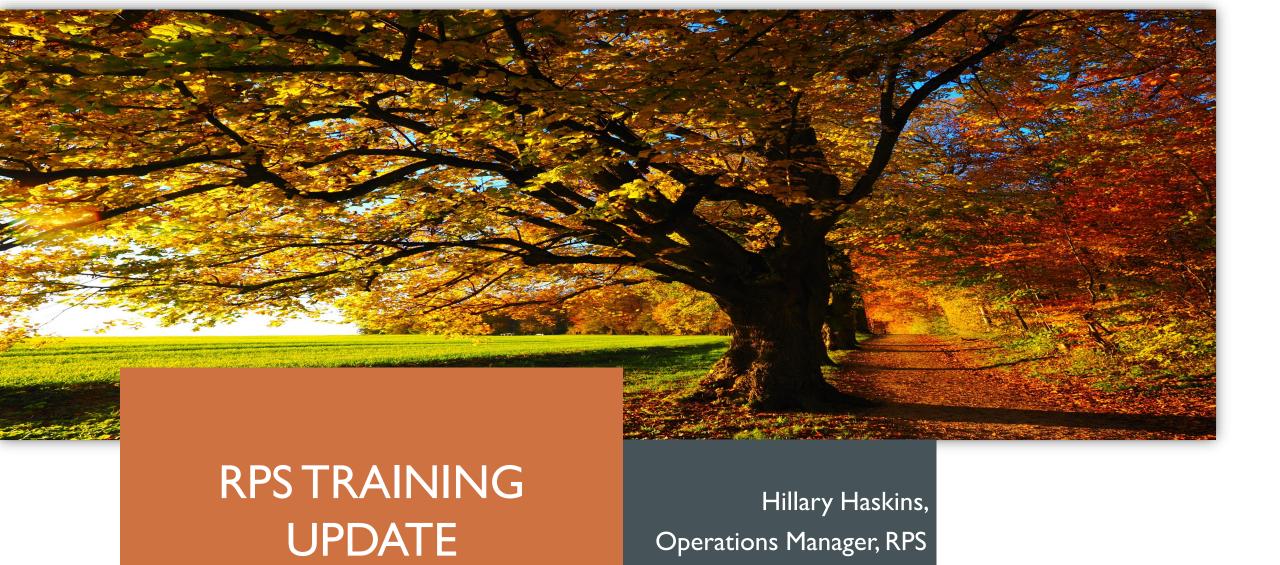
Multiple waste/scrap facility portal monitor alarms

- I-131
- Lu-177
- Scrap Metals

EMERGENCY RESPONSE / INCIDENTS UPDATE

Hillary Haskins,
Operations Manager, RPS







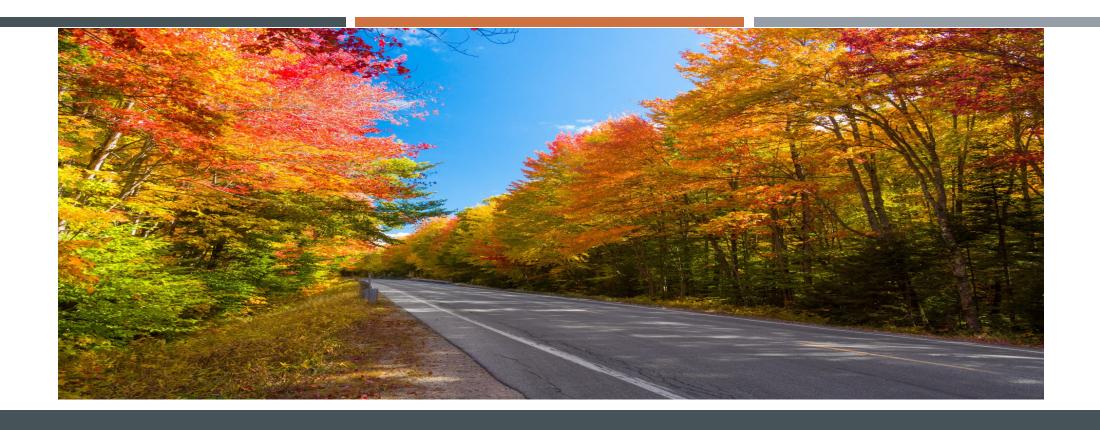
CONFERENCES, TRAININGS & EVENTS

July 13 th	Gryphan Scientific – Grace Adams presenting on When to Evacuate & Decontamination			
July 17-21 st	NRC (G-109) Radioactive Materials Licensing Course (Virtual) – Dong, Toby, Sarah, Rich			
July 24-26 th	ICS 300: Intermediate Incident Command System for Expanding Incidents sponsored by HSPR – Ram, Patty			
Aug 7-10	Organization of Agreement States (OAS) Annual Meeting — Seattle, WA — David, Hillary			
Aug 8-9 th	ICS 400: Advanced Incident Command Systems for Complex Incidents sponsored by HSPR - Ram, Patty			
Aug 21-25 th	REP Executive Course, Monterey, CA – Todd, Hillary			
Aug 28-31st	MARSSIM course – Tom P.			
Sept 19-21 st	Civil Support Team Evaluated Drill – Chemeketa Community College in Salem – Hillary, Dong			
Sept 27 th	Civil Support Team Hazmat/Radiation Presentation - Tualatin Valley Training Center - Hillary, Mary, Patty			
Oct 10 th	US. Navy invitation to inspect reactor compartment packages Ex-Dallas (SSN700) – Bremerton, WA – Toby, Dong, Mary			



BREAK





EXEMPTIONS / RULES / STATUTES

BRENT HERRING



YEAR-TO-DATE NUMBER OF EXEMPTIONS

- As of end of September 2023
 - 17 New Exemptions Processed
 - 12 Amended Exemptions (Addendums)
 - Possible upcoming exemptions
 - MQSA FDA new rule concerning dense breast notification
 - FDA rule vs State of Oregon

Previous years exemptions

2022 – 10 exemptions

2021 - 2 exemptions

2020 – 5 exemptions

2019 – 10 exemptions

2018 – 11 exemptions

2017 – 5 exemptions



EXEMPTIONS BIOLOGY GUIDED RADIOTHERAPY (BGRT) OPERATORS

- New Technology approved by FDA in Feb 2023
 - Takes Positron Emission Tomography/Computed Tomography (PET/CT) and radiation therapy (Linac) and combines them into one machine.
- BGRT being installed in Salem Hospital
- Operators
 - 2 Operators (1 operator for the PET/CT and 1 operator for the LINAC)
 - Nuclear Medicine (PET/CT)
 - Registered Technologist in Nuclear Medicine Technology (RT-N)
 - Certified Nuclear Medicine Tech (CNMT) certified in CT by American Registry of Radiologic Technologists (ARRT)
 - Radiation Therapy (LINAC)
 - Registered Technologist in Radiation Therapy (RT-T)
 - 1 Operator (1 operator for both the PET/CT and LINAC)
 - RT-T performs all duties with approved education, training, and competency in PET/CT
 - Working under an Authorized User (AU)
 - Basic radiation safety training
 - 40 hours specific to PET
- ASRT no longer has PET curriculum because they put it in CT curriculum



CLEAR CHOICE DERMATOLOGY SUPERFICIAL BRACHYTHERAPY MACHINE OPERATION UPDATE

- Since last RAC Meeting
 - Exemption request was denied for general supervision
 - Needed to submit documentation on:
 - Training
 - Floor Plan
 - Needed an additional interlock on the exit door
- Approval given end of August 2023



CLINIC OF DERMATOLOGY & WELLNESS (SKINCURE ONCOLOGY)

- Superficial Electronic Brachytherapy in Medford
- From the same company that registered and installed the one in Bend
- All documentation submitted was approved
- Approval given end of June 2023
- First inspection was end of September 2023



NEW VENDOR APPLICATION FOR MEDICAL PHYSICISTS PRE-2007

- Rule OAR 333-123-0015(2) Training and Qualification Requirements for individuals in External Beam Radiation Therapy Area
 - Must be Board certified (ex. ABR) OR prior to January 1, 2007 must have been actively working in therapeutic radiation in the State of Oregon or licensed with RPS (exempt)
 - Application was originally denied because they left Oregon and worked in Nevada, plus 333-123-0015(2)(e) states that if they are not board certified then they must work under supervision of a QMP
 - Application was re-evaluated and approved based on:
 - The pre 2007 date trumps the (2)(e) rule, AND they have been working before 2007.
 - Received attestation letters from both Oregon and Nevada facilities on work performed.

THE JOINT COMMISSION STAFF QUALIFICATIONS

- 33 The hospital verifies and documents that diagnostic medical physicists who support computed tomography (CT) services have board certification in diagnostic radiologic physics or radiologic physics by the American Board of Radiology, or in Diagnostic Imaging Physics by the American Board of Medical Physics, or in Diagnostic Radiological Physics by the Canadian College of Physicists in Medicine, or meet all of the following requirements:
 - A graduate degree in physics, medical physics, biophysics, radiologic physics, medical health physics, or a closely related science or engineering discipline from an accredited college or university
 - College coursework in the biological sciences with at least one course in biology or radiation biology and one course in anatomy, physiology, or a similar topic related to the practice of medical physics
 - Documented experience in a clinical CT environment conducting at least 10 CT performance evaluations under the direct supervision of a board-certified medical physicist

Note: This element of performance does not apply to dental cone beam CT radiographic imaging studies performed for diagnosis of conditions affecting the maxillofacial region or to obtain guidance for the treatment of such conditions.



GO HEALTH FACILITY EXEMPTION VIOLATION & CORRECTIVE ACTION

- Exemption 375 Granted GO Health exemption, on Nov. 5, 2015, from rule 333-106-0045(4) Portable or mobile x-ray equipment shall be used only for examinations where it is impractical to transfer the patient(s) to a stationary x-ray installation due to the medical status of the patient or inability of the patient to be left alone during the imaging procedure
- Exemption conditions:
 - Shielding study on each room machine will be used in
 - Shielding study performed by qualified expert
 - Shielding study must be submitted to RPS for approval prior to putting x-ray machine in clinical use
 - Shielding study must address all items in 333-106-0120 (Information on Radiation Shielding for Plan Review)
 - If shielding study indicates additional shielding needed, then GO Health must follow recommendations before x-ray machine use

GO HEALTH FACILITY EXEMPTION VIOLATION & CORRECTIVE ACTION

- Follow-up noticed six new facilities with no shielding studies submitted to RPS. RPS notified GO
 Health they were in violation of their exemption.
- GO Health submitted new shielding plans
- Recent inspection yielded violations in their exemption. It was noted that primary beams being aimed at secondary shielded areas or no areas with lead.
- RPS notified GoHealth that based on their second exemption violation they were now subject to possible fines and loss of their exemption.
- Meeting with GOHealth corporate where they submitted their corrective action.
 - Only primary shielded walls will be used
 - Shielding study will be used for guide on each room
 - Each machine has map of each room used
 - All techs are trained on each room and updates
 - RPS will visit each facility within the following weeks to verify



DIRECT VS. PERSONAL SUPERVISION OF RADIOLOGIC TECHNOLOGISTS IN FLUOROSCOPIC PROCEDURES

- Rule OAR 333-106-0205(4)(c) Radiologic Technologists who have a permanent or temporary license from OBMI to practice radiography may operate fluoroscopic equipment **under the personal or direct supervision** of a radiologist or a non-radiologist practitioner who has had proper training in the use and operator of fluoroscopic x-ray equipment
- Issues with this:
 - Some facilities are saying the radiologist down the hall is directly supervising the Operating Room (OR) cases in the same building
 - The non-radiologist practitioner (operating doctors) does not have fluoroscopy training, BUT are telling the rad techs what to do with the fluoroscopy equipment (expose, move machine, etc.)
 - Radiologists may not know they are "supervising"
 - Who is responsible if there is an issue with the patient or personnel in the OR?
 - Rads directly supervising department (radiology) cases down the hall
 - Procedures
 - RPS has been trying to get all non-radiologists trained but we get some resistance from hospital management and doctors.
- RPS proposes to amend rules that all non-radiologist practitioners need fluoroscopy training.

TANNING RULES – INSTALLER WITH ELECTRICIAN LICENSE REQUIREMENT CLARIFICATION

- Rule OAR 333-119-0100 (4) Specific Requirements All persons hired for servicing and repair of tanning devices shall be State of Oregon licensed electricians
- Brought forth by concerned vendor
- Most vendor work involves installation and parts replacement.
- RPS consulted Oregon electrician rules and Oregon licensed electrician
 - The only need for Oregon licensed electrician is for box work, installing lines etc.
 - Machine installation and part replacement does not require an electrician license.





LUNCH





EMERGENCY PREPAREDNESS/RESPONSE

Hillary Haskins

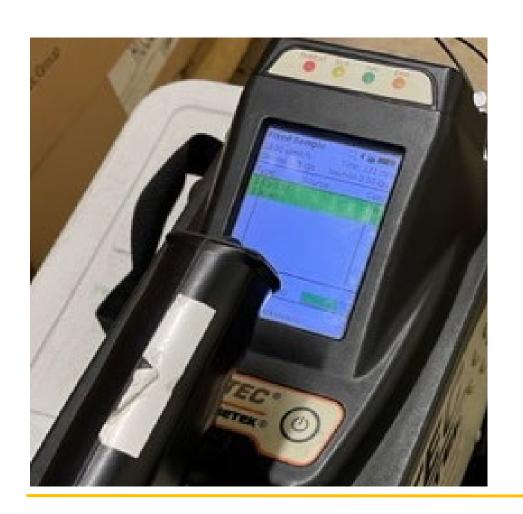




PUGET SOUND NAVAL SHIPYARD – NUCLEAR CORE COMPARTMENT INSPECTION AND TOUR

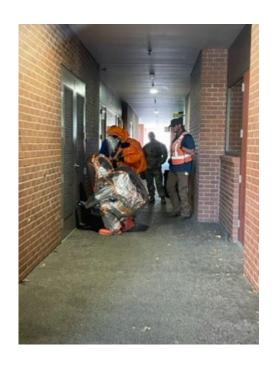


102ND CIVIL SUPPORT TEAM EVALUATED DRILL



- Sept 19th
- Chemeketa Community Collage







RIID ACQUISITION & NEW PERSONAL ELECTRONIC DOSIMETRY

- RIID
 - 2 Ortec RADEAGLET-R
- X-ray Inspection Meters
 - 12 RadCal Accu-Gold Touch
- Upcoming Personal Electronic Dosimetry
 - Trade in old Canberra's
 - Looking into Grant funding options
 - Oregon Emergency Management
 - FEMA
 - Department of Homeland Security



CIVIL SUPPORT TEAM / FBI / HAZMAT VEHICLE ROLL OVER SCENARIO DRILL

SEPT 27, 2023

CST: Conduct Defense Support of Civil Authorities.

Hazmat Team: Remove endangered people, conduct emergency rescue operations, and act as technical advisors to the incident commander at scenes of hazardous material releases.

FBI WMD Coordinator: Level 3 Stabilization Team. The Bureau will immediately respond on calls of bomb threats and suspected explosive devices using the following procedures to protect the lives of citizens, protect the lives of members and protect property.

FBI Bomb Techs: The WMD Coordinator, a designated Special Agent within each field office, is responsible for initiating the federal response to any possible WMD event. the WMD Coordinator responds to the scene and assists local and state law enforcement in determining the threat.

Oregon State Public Health Laboratory (OSPHL): OSPHL has been actively protecting the public's health since 1903 by supporting state and local infectious disease control efforts, preventing metabolic disorders detectable at birth, and assuring the quality of testing in clinical and environmental laboratories.

Radiation Protective Services: Oregon Radiation Protection Services works to promote the health and safety of the people in Oregon by protecting them from unnecessary exposure to radiation.

CBRN Enhanced Response Force Package (CERFP): CERFP is a regional emergency response entity owned by the National Guard. It is manned by roughly 200 drilling soldiers and airmen that can be put on orders to respond to WMD, manmade and natural disasters.

CIVIL SUPPORT TEAM / FBI / HAZMAT VEHICLE ROLL OVER SCENARIO DRILL











FUKUSHIMA TRITIUM RELEASE INTO THE PACIFIC OCEAN



Statement from US State Dept. (April 2021) - https://www.state.gov/government-of-japans-announcement-on-fukushima-treated-water-release-decision/



International Atomic Energy Agency
(IAEA) info Regarding Fukushima
Advanced Liquid Processing System
(ALPS) & IAEA Task Force https://www.iaea.org/topics/response/
fukushima-daiichi-nuclearaccident/fukushima-daiichi-alpstreated-water-discharge





UPCOMING 2023/2024 TRAINING/EVENTS

2023

December 11-14th NRC G-109 Licensing Course RPS delivered course

2024

February 6-7th CGS FEMA-Evaluated Dress Rehearsal – Ingestion Pathway Exercise

February 22nd NRC IMPEP Periodic Meeting

March 26-27th CGS FEMA-Evaluated Full Exercise



NEW BUSINESS





800 NE Oregon Street, Suite 640

Portland, OR 97232

Voice 971-673-0490

FAX 971-673-0553

TTY 971-673-0372

October 11, 2023

To: Mammography Facility Registrants

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

Information Bulletin 2023-02

Subject: Pending Mandatory Dense Breast Tissue Notification Language

The State of Oregon, Oregon Health Authority, Radiation Protection Services (RPS) is issuing this information bulletin to all accredited mammography facilities regarding Mammography Quality Standards Act (MOSA) amendments to the Code of Federal Regulation 21.900 s that will become effective September 10, 2024; while there are several amendments, one amendment includes dense breast tissue language that is in conflict with State of Oregon rules.

Background

During the 2013 legislative session, Oregon Senate Bill 420 established Oregon Revised Statute 431A.50 which mandates healthcare facilities offering mammography services to provide a notification in a form prescribed by the Oregon Health Authority to patients with dense breast tissue. Per Oregon Administrative Rule (OAR) 333-106-0735, specific language is required to provide the individual an explanation that dense breast tissue can make it harder to find cancer on a mammogram, including the possibility of the need for supplemental imaging based on the patient's risk factors. This information is provided within the lay person summary mammography report issued to the patient when dense breast tissue has been determined by a radiologist.

New Mandatory Dense Breast Notification

Effective September 10, 2024, RPS will incorporate, by OAR reference, a requirement for accredited mammography facilities to use new Food and Drug Administration (FDA) dense breast notification language from one of the two below italicized statements, depending upon the patients' status, including:

Low Dense Breast Notification language

The lay summary must include the statement verbatim, "Breast tissue can be either dense or not dense. Dense tissue makes it harder to find breast cancer on a mammogram and also raises the risk of developing breast cancer, Your breast tissue is not dense, Talk to your healthcare provider about breast density, risks for breast cancer, and your individual situation."

Dense Breast language

The lay summary must include the statement verbatim, "Breast tissue can be either dense or not dense. Dense tissue makes it harder to find breast cancer on a mammogram and also raises the risk of developing breast cancer. Your breast tissue is dense. In some people with dense tissue, other imaging tests in addition to a mammogram may help find cancers. Talk to your healthcare provider about breast density, risks for breast cancer, and your individual situation."

Effective immediately, RPS is granting accredited mammography facilities the option to use existing OAR 333-106-0735 dense breast notification language or to utilize the above new FDA dense breast notifications because they also adhere to SB 420 statutory language elements. There is no need to request an exemption. After September 10, 2024, all healthcare facilities offering mammography services will be required to use the above FDA dense breast notification language.

The FDA breast density language is only one part of the new MOSA amendments. The MOSA amendments can be located at the link below:

https://www.federalregister.gov/documents/2023/03/10/2023-04550/mammography-gualitystandards-act

One can subscribe to the MQSA listsery to receive email updates as new information is posted on FDA's website: https://www.fda.gov/radiation-emitting-products/mammography-gualitystandards-act-and-program

All questions concerning MQSA amendments should be directed to the FDA.

Any other questions should be directed to RPS Electronic Products Lead Worker, Brent Herring (brent.e.herring@oha.oregon.gov; 503-891-0098).



PUBLIC COMMENTS





THANK YOU FOR ATTENDING

NEXT MEETING IS FEBRUARY 14, 2024

