

State of Wyoming



Department of Health

Public Health Radiological Response Plan

**Brent D. Sherard, M.D., M.P.H., F.A.C.P.,
Director and State Health Officer**

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Radiological Response Plan

The Radiological Response Plan is published by the
Public Health Emergency Preparedness Program
Angela Van Houten, MS
Manager

Additional information and copies may be obtained from:

Amber Erickson, MPH
Emergency Preparedness Epidemiologist
Public Health Emergency Preparedness Program
Wyoming Department of Health
2300 Capital Ave
Cheyenne, WY 82002
Phone: (307)777-3520
Fax: (307)777-8574
amber.erickson@health.wyo.gov

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I. Purpose

The purpose of this plan is to provide the Wyoming Department of Health (WDH) staff with procedures and technical references for responding to radiologic incidents in Wyoming. It consists of two parts. The first part is this incident annex, including procedures and key contacts. The second part is the Radiologic Response Binder that includes technical references and is kept in three locations: the hallway bookshelf on the fifth floor of the Qwest Building, Preventive Health and Safety Division, on the fourth floor of the Hathaway Building in the WDH Emergency Operations Center, and on the WDH website.

II. Concept of Operations

WDH's response to a radiologic incident will be consistent with incident management guidance articulated in the WDH Emergency Operations Plan.

Radiologic incidents may include the following:

- Significant exposures of persons from ionizing radiation.
- Transportation accidents involving radioactive shipments.
- Explosion, fire, or both at facilities where radioactive material is present.
- Stolen or lost radioactive material.
- Injuries involving radioactive material.
- Intentional or unintentional release of radioactive material that involves an immediate radiation hazard to people.

III. Scope and Authorities

A. This plan focuses on WDH's roles and responsibilities for radiologic incidents in Wyoming. The roles of federal agencies are detailed in the National Response Framework, Nuclear/Radiologic Incident Annex:

1. See the Radiological Response Binder, Section 2

B. The Wyoming Office of Homeland Security (WOHS) is the state's lead coordinating agency for radiologic incidents (WY Highway Patrol has on-scene command of incidents involving radioactive materials in transportation). Under W.S. § 35-9-153 (2007), the State Emergency Response Commission (SERC) oversees WOHS under which exists a state Radiologic Incident Response Guide.

1. Per W.S. § 35-9-153, the SERC representatives include WOHS, Wyoming Department of Environmental Quality (DEQ), WDH, University of Wyoming Environmental Health and Safety Office (UWEHS), the Wyoming Department of Transportation (WYDOT), the Wyoming Department of Agriculture (WDA), and the Wyoming Department of Fire Prevention and Safety (WDFPS)
2. WOHS maintains and operates radiologic monitoring equipment (see Radiological Response Binder, Section 2, Radiation Measurement Equipment Available in Wyoming) and provides monitoring equipment to Wyoming Highway Patrol (WYDOT), emergency management/homeland security coordinators, Wyoming hospitals, and state Regional Emergency Response Teams (RERT).

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3. Other local radiologic screening resources include the seven (7) Regional Emergency Response Teams, the Wyoming National Guard Civil Support Team and the US Air Force 90th Space Wing, FE Warren Air Force Base.
- C. WOHS will coordinate the following actions upon notification of a known or suspected radiological incident:
1. Evaluate available information to determine the extent of the hazard and what action is needed
 2. Notify the WDH radiation contact and support agencies as needed (see IV.D.2 in this annex)
 3. Coordinate formal requests for assistance with federal agencies
 4. Establish and maintain communications with local authorities
 5. Arrange for transportation to the incident site if needed
 6. Provide technical assistance as needed
 7. Perform indicated monitoring and evaluation of results
 8. Initiate necessary protective actions in coordination with on scene commanders
 9. Coordinate monitoring until no further radiation or contamination hazard is present
 10. Notify appropriate agencies when no further hazard exists.
 11. Prepare incident report
- D. WDH will support WOHS and perform further statutory responsibilities in a radiologic incident by carrying out the following actions as appropriate:
1. Protecting the health and safety of the public
 2. Monitoring workers' health and safety
 3. Coordinating with local health and emergency officials to provide safe shelters
 4. Recommending patient decontamination procedures
 5. Coordinating provision of health and medical services with local health departments and healthcare providers
 6. Assisting with radiologic monitoring of persons who may have been contaminated with radioactive materials or exposed to radiation
 7. Recommending management protocols for affected persons
 8. Conduct long-term tracking through the development of a tracking registry
 9. Coordinating collection and laboratory analysis of patient and environmental samples
 10. Conducting epidemiologic investigations
 11. Recommending disease prevention and control measures
 12. Coordinate with the State & Federal Strategic National Stockpile (SNS) for proper staging and distribution of Federal and State assets for radiological treatment
 13. Communicating necessary information to healthcare providers
 14. Communicating safety messages and updates to the public
 15. Coordinating as appropriate with partner agencies including WDA; DEQ, WYDOT; US Department of Health and Human Services (HHS); US Centers for Disease Control and Prevention (CDC); US Departments of Agriculture (USDA); US Department of Energy (DOE); US Food and

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Drug Administration (FDA); US Environmental Protection Agency (EPA); and the Nuclear Regulatory Commission (NRC); US Department of Homeland Security (DHS).

- E. The WDH Laboratory currently does not perform in-house radiologic testing. Laboratory specimens are sent to cooperating reference laboratories such as the Colorado Public Health Department Laboratory. WOHS Radiological Services will perform limited in-house testing on field-collected environmental samples.

IV. Response Steps

A. Gather Information About the Incident:

1. If WDH notification is from the public, advise them to notify their emergency responders. Additionally, when first notified of radiologic incidents, record as much of the following information as possible. Much of this information may not be available at the time of initial notification, and will be gathered and considered as part of the WDH response. (See Appendix A: WDH Radiological Incident form):
 - a. The nature of the incident
 - b. Name, title, location, and phone number of the person making the report
 - c. Time of the incident
 - d. Location of the incident
 - e. Accessibility of the location
 - f. If fire is involved
 - g. Known radioactive isotopes involved
 - h. Form of the radioactive material, sealed source, liquid, metallic, etc.
 - i. Presence of contamination
 - j. Estimated activity of radioactive material involved in the incident (placard numbers, labels, etc.)
 - k. Number of people involved including nature of injuries and approximate exposure levels if possible to determine
 - l. Location to which patients are likely to go or to be taken
 - m. Weather conditions
 - n. Other state or federal agencies notified and status of their response
 - o. Whether news media are aware of the incident and what information has been circulated

B. Obtain the WDH Radiation Response Binder

The Radiological Response Binder, including technical references, is kept in three locations: the hallway bookshelf on fifth floor of the Qwest Building, Preventive Health and Safety Division, the fourth floor of the Hathaway Building in the WDH Emergency Operations Center, and on the WDH website.

C. Initiate the Chain of Command

1. First initiate the chain of command by calling the following WDH individuals:

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- a. Public Health Emergency Preparedness (PHEP) Program Manager
 - i. 307.421.0143 (cell)
 - ii. 307.631.8715 (cell)
- b. State Epidemiologist
 - i. 307.777.7716
 - ii. 307.421.1188 (cell)
- c. State Health Officer (if State Epidemiologist is unavailable)
 - i. 307.631.0533 (cell)

D. Ensure Proper Communication

- 2. Work with WOHS Radiation Services Supervisor or Operations Section to evaluate the situation, locate and deploy monitoring equipment and personnel, and reduce immediate health risk to the public and responders:
 - a. WOHS Duty Officer,
 - i. 307.777.4663 (daytime)
 - ii. 307.777.4321 (day or night, ask for WOHS Duty Officer)
 - b. WOHS Radiological Services staff, Operations
 - i. 307.421.0206 (cell)
 - c. WOHS Radiological Specialist
 - i. 307.421.9351
- 3. Contact key WDH staff and local agencies:
 - a. WDH Radiation Contact
 - i. 307.631.5741 (cell)
 - b. WDH Emergency Operations Center (EOC)
 - i. 307.421.0143 (cell)
 - ii. 307.631.8715 (cell)
 - iii. 307.421.2777 (cell)
 - c. WDH Laboratory Director
 - i. 307.421.0147 (cell)
 - d. PHEPP Lab Coordinator
 - i. 307.631.6087 (cell)
 - e. WDH Public Information Officer
 - i. 307.631.2601 (cell)
 - f. WDH SNS coordinator
 - i. 307.631.0024 (cell)
 - ii. 307.421.7997 (cell)
 - g. WDH WARN:
 - i. 307.272.1006 (cell)
 - ii. 307.631.8715 (cell)
 - h. State Public Health Veterinarian
 - i. 307.421.8591 (cell)
 - i. County Emergency Coordinator (Radiological Response Binder, Section 1, Attachment 1)
 - j. County Health Officer (Radiological Response Binder, Section 1, Attachment 2)
 - k. County Public Health Nurse Supervisor (Radiological Response Binder, Section 1, Attachment 3)

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- l. County Public Health Emergency Response Coordinator
(Radiological Response Binder, Section 1, Attachment 4)
- m. Regional Veterinary Public Health Coordinators (Radiological
Response Binder, Section 1, Attachment 5)

E. Additional key agencies:

- 1. UWEHS Radiation Safety Officer
 - a. 307.339.5239 (cell)
- 2. WY HWY Patrol / Dispatch
 - a. 307.777.4321 (day or night)
- 3. Federal Bureau of Investigation:
 - a. 307.632.6224 (State Field office)
 - b. 303.629.7171 (Regional field office)
- 4. WY CST: Contact through the Joint Operations Center (JOC),
 - a. 307.772.5112
- 5. DEQ Land Quality Administrator,
 - a. 307.777.7756 (day or night)
- 6. WDA Director's Office:
 - a. 307.777.6569 (day)
 - b. 307.631.3556 (night)
- 7. Wyoming Livestock Board:
 - a. 307.777.6443 (day or night)
- 8. EPA's Radiological Emergency Response Team (RERT):
 - a. Contact the National Response Center (NRC):
 - i. 800.424.8802

F. Obtain technical guidance as needed:

- 1. Federal assistance (call jointly with WOHS):**
 - a. See Radiological Response Binder, Section 1, Attachment 6
- 2. Dose estimation/health effects:**
 - a. Radiological Response Binder, Section 5, "Measuring Human Radiation Exposure: Dose Estimation and Health Effects"
- 3. Decontamination:**
 - a. Radiological Response Binder, Section 6, "Decontamination"
- 4. Veterinary/Animal Assistance:**
 - a. Radiological Response Binder, Section 6.10 "Veterinary decontamination procedures"
 - b. Contact the Regional Veterinary Public Health Response Coordinator (Radiological Response binder, Section 1, Attachment 5)
- 5. Hospital receiving of contaminated patients:**
 - a. Radiological Response Binder, Section 7, "Medical Management of Radiologically Contaminated Patients"

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6. Medical management of internal contamination:

- a. Call REAC/TS,
 - i. 865.576.3131 (day)
 - ii. 865.576.1005 (24 hr)
- b. Also, see Radiological Response Binder, Section 7, “Medical Management of Radiologically Contaminated Patients”

7. General Shelter Information:

- a. Radiological Response Binder, Section 9, “Shelter”

8. Population monitoring:

- a. Radiological Response Binder, Section 11, “Population Monitoring”

9. Public information/Risk communication:

- a. Radiological Response Binder, Section 12, “Public Information/Risk Communication”

10. Collection/testing of human specimens:

- a. Call WDH Laboratory Director / PHEPP Lab Coordinator
 - i. 307.631.6087 (cell)
 - ii. 307.421.0147 (cell)
 - iii. Check capabilities with CO DPH
- b. Call GEL Laboratories, LLC
 - i. 843.556.8171
- c. Call REAC/TS
 - i. 865.576.3131 (day)
 - ii. 865.576.1005 (24 hr)
- d. Also, see Radiological Response Binder, Section 15, “Collection/Testing of Human and Environmental Specimens”

11. Collection/testing of environmental specimens:

- a. Call WDH Laboratory and WDEQ radiologic contact
- b. Call REAC/TS:
 - i. 865.576.3131 (day)
 - ii. 865.576.1005 (24 hr)
- c. Also, see Radiological Response Binder, Section 15. “Collection/Testing of Human and Environmental Specimens”

12. Obtaining Strategic National Stockpile assets:

- a. Call WDH SNS Coordinator
 - i. 307.631.0024 (cell)
 - ii. 307.421.7997 (cell)
- b. Also, see Radiological Response Binder, Section 8, “Strategic National Stockpile”

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13. Shipping radiologic specimens:

- a. Call WDH Laboratory Director / PHEPP Lab Coordinator
 - i. 307.637.6087 (cell)
 - ii. 307.421.0147 (cell)
- b. Federal Express
 - i. 307.635.3441
- c. Also, see Radiological Response Binder, Section 16, "Shipping Radiologic Specimens"

V. Appendices

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Appendix A: Wyoming Department of Health Radiological Incident Form

Preliminary Information

Nature of Incident		
Last Name	First Name	Middle Initial
Your Location	Phone Number	

Details of the Incident

Time of the Incident		Location of Incident	
Accessibility of Location			
Is there a fire? ☐ Yes ☐ No			
Known Radioactive Isotope List (Please check all that apply)			
☐ Americium -241 ☐ Cesium-137 ☐ Cobalt-60 ☐ Iodine-131 ☐ Iridium-192	☐ Plutonium ☐ Polonium-210 ☐ Strontium ☐ Uranium	☐ Other (please list) 	
Are they any other known hazardous materials involved? If so, please list all that are involved: 			
Form of radioactive material (e.g. sealed source, liquid, metallic, etc.)			
Is there contamination present? ☐ Yes ☐ No ☐ Unknown at present time			
Estimated activity of radioactive material involved in the incident (placard numbers, labels, etc.,)			
Number of people involved in the incident (excluding all those who have NOT been exposed):			

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Nature of Injuries of persons involved:	Location to which patients are likely to go or be taken:
Weather Conditions (including wind direction if possible):	
State and/or Federal Agencies that have been notified:	Status of response of State and/or Federal Agencies:
Has any form of media been notified of the incident? ☐ Yes ☐ No	
If a media source has been notified, what information has been circulated?	