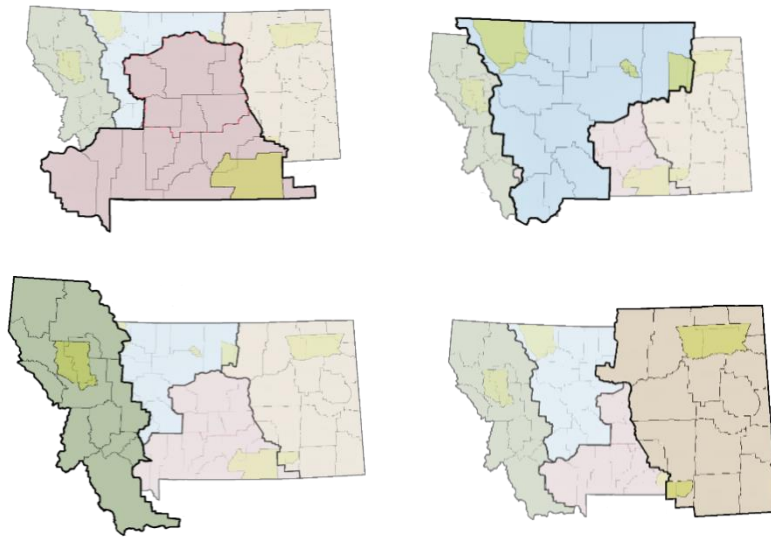


SOUTHERN REGION HEALTHCARE COALITION



RADIATION SURGE ANNEX

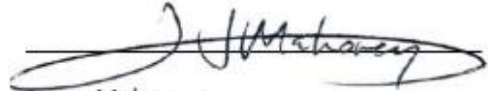
June 2023
Version 1

PROMULGATION

The Executive Committee of the Southern Region Healthcare Coalition support and provide this planning tool to assist the healthcare communities within the boundaries of the Southern Region Healthcare Coalition.



Greg Coleman, Chair



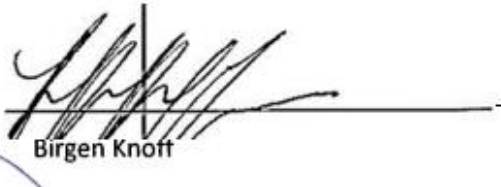
Jason Mahoney



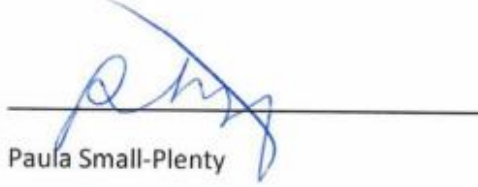
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RECORD OF CHANGE

Date	Description of Change	Initials
June 2021	First Edition	CD
June 2023	Final Edition	

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SECTION 1: INTRODUCTION, PURPOSE, SCOPE, SITUATION, AND ASSUMPTIONS

1.1 INTRODUCTION

A radiation mass casualty incident, is defined as any incident where capacity and capability significantly compromises patient care, in accordance with individual facility, local, state, regional or federal disaster response plans. Smaller incidents within a locality or region of Montana may classify as a Radiation MCI if taxing on the facility, staffing, or resources.

This plan is intended to be flexible to fit the needs of the response, covering all aspects of a tiered approach, to response from the local level up to federal assistance as necessary. It contains guidelines for radiation surge in the Region Health Care Coalition facilities, including resources for staff training and augmentation, supplies and equipment, and special consideration. Participation by hospitals, healthcare systems and their partners is encouraged to ensure the best possible patient outcomes for all those treated within the region. Where possible, the plan leaves the majority of the decisions and processes up to the healthcare entities.

1.2 Purpose

This Radiation Surge Annex provides guidance to support a radiation mass casualty incident (MCI) in which the number and/or severity of patients exceeds the capability of the Southern Region Health Care Coalition (SRHCC) member facilities. The goal of this plan is to provide recommendations and support to responding facilities as able.

The annex provides guidance to support a coordinated healthcare response to a radiation emergency in which the number and severity of exposed or possibly exposed patients challenges the capability of SRHCC member facilities. The annex will outline specific incident response, treatment, and response protocol necessary to properly plan for, manage, and care for patients during a radiological emergency. This Annex does not replace other county or local emergency operations plans or procedures, but rather builds upon the existing plans and their annex.

1.3 Scope

The Radiation Surge Annex is an Annex to the larger SRHCC Preparedness and Response Plan and is applicable for any incident that may be classified as a Radiation MCI. This annex is intended for use by the Health Care Coalition to assist in providing coordination during a Radiation MCI. This plan outlines the concept of coordination for incidents wherein the complexity or duration requires regional support in information or resource sharing.

This Radiation Surge Annex involves all participating organizations, agencies, and jurisdictions contained within the geographical boundaries of the SRHCC. Many of these participants may have their own protocols for responding to a Radiation MCI. This document is designed to work with those protocols

and does not define or supplant any emergency operating procedures or responsibilities for any member agency or organization in the SRHCC. It is not a tactical plan or field manual, nor does it provide Standard Operating Procedures (SOP). Rather, it is a framework for maintaining the scope of the Coalition and outlining the support that may be available as requested. This plan intentionally does not provide specific or quantitative thresholds for activation or demobilization of organizational structures or processes described herein. Such determinations are situation-dependent and left to incident management. This plan is intended to be compatible with federal, state, and local emergency response plans, promotes the coordination of an efficient and effective response by utilizing the concepts outlined in the National Incident Management System. Implementation is not contingent on the activation of the SRHCC Emergency Preparedness & Response Plan. SRHCC activities in this framework are based on established relationships and partnerships with the public, stakeholders, and contributing agencies.

Planning for Radiation MCI emergencies includes medical needs associated with mental, behavioral health, and substance abuse considerations of incident victims and response workers. Services also cover the medical needs of individuals classified as having access, functional, or special needs. The Coalition recommends that all healthcare entities include these special populations within their facility specific plans.

This plan is based on the current capabilities of the SRHCC and will be modified and updated as the Coalition grows. All aspects of this plan will be performed as able upon the request for assistance from any healthcare entity within the region.

1.4 Overview/Background of HCC and Situation

The SRHCC encompasses all healthcare organizations and facilities in the Southern Region Health Care Coalition. Populations served by facilities within this region include one Native American Reservation, two urban centers, and many frontier counties.

The SRHCC's notes the following radiation related incidents as possible or likely in the jurisdiction: train derailment, motor vehicle accidents, or hazardous materials in waste stations. The region also has several non-nuclear power stations including electric, wind and hydroelectric generating plants. Montana is also home to numerous Minuteman Missile Alert and Launch facilities which could be a source of nuclear or radiological contamination.

Healthcare Facilities

With the lack of any designated radiation treatment facilities in Montana, any healthcare facility in the state could encounter a Radiation MCI situation. However, all facilities might not have adequate capabilities to provide optimal and safe care for that patient. Facilities should be aware of designated trauma referral patterns within the state. The primary medical provider will determine the need and options for patient transfer in the event of a patient with radiation injuries that require a specialized level of care.

In this region there are:

- 5 Hospitals (2 ACS Level 2, 1 ACS Level 3)

- 11 Critical Access Hospitals
- 1 Tribal/IHS Hospitals
- 0 HID Assessment Hospitals
- 0 Veteran’s Affairs Hospital
- 25 Clinics
- 40 EMS
- 19 Long-Term Care Facilities
- 15 Public Health Departments

1.5 Assumptions

The following are the planning assumptions for the purposes of this framework:

- Radiation incidents may be accidental in nature (e.g., industrial or transportation accident) or purposeful, require prolonged response and extensive resource management challenges.
- Substantial differences in response protocols and priorities exist between, but are not limited to medical treatments, industrial, terrorist (e.g., RDD/dirty bomb) and nuclear bomb detonation. The facility plan should emphasize the scenario(s) most relevant to the community.
- The Coalition annex does not replace the need for protocols at each hospital and EMS agency
- Different agencies may have authority over management of power plant, transportation, and terrorist incidents, including the authority to implement shelter-in-place and evacuation orders.
- The roles and responsibilities of agencies and organizations will change depending on the severity and scale of the incident and the respective level of activation by impacted jurisdictions and should be outlined ahead of an incident by the local jurisdictions.
- Federal, state, and local emergency resources will all be needed during a large-scale event.
- Contamination assessments, proper PPE utilization, and decontamination efforts will be essential in protecting coalition partners, staff, and the public
- Staff at coalition facilities may be impacted by exposure, fear of exposure, or family obligations (e.g., child/family care if schools are closed, acute care facilities are affected).
- Fear from the incident will cause a worried well surge to the emergency departments and pharmacies. Facilities and agencies should consider how limited understanding of radiation and nuclear contamination will contribute to public anxiety and will require multi-modal solutions.
- Public safety (e.g., police, fire, EMS) and other first responder personnel are considered a high-risk population; the implementation of protocols for monitoring control zones and effective contamination control measures will be essential for workforce protection.
- Federal resources (e.g., ambulance contracts, National Disaster Medical System [NDMS] teams) cannot be relied upon to mobilize and deploy for the first 72 hours.
- Management of contaminated waste from decontamination efforts should be managed in consultation with SMEs, EPA, and local water authorities.
- All hospitals providing emergency care may receive radiation contaminated patients and should be able to provide initial assessment and stabilization before transferring to a higher level of care.

- An incident triggering the activation of the SRHCC Radiation Surge Annex will happen with little or no warning.
- Initially, all local hospitals will follow the facility's organizational protocols when faced with victims exposed to radiation.
- The major focus for an exposed patient is supportive care and determining which patients will most benefit from a dedicated specialty center.
- Care of radiation exposure and any subsequent burns is extremely resource-intensive and requires specialized staff, expert advice, and critical care transportation assets.
- Patients often become clinically unstable, complicating transfer plans.
- National bed capacity is limited, and coordination of patient transfers (destinations and logistics) may take days to achieve when out-of-state capacity is required.

SECTION 2: CONCEPT OF OPERATIONS

2.1 Activation

Activation of this plan will occur upon the request for assistance from any health care entity within the region.

The initial response to a radiation mass casualty incident will likely be the responsibility of the local first responder. Health care organizations partnered with emergency management agencies, public health, law enforcement, and other response agencies, should utilize all appropriate available local resources. Existing protocols for incident command, hospital notification, coordination of resources, and distribution of patients will be adhered to, with all efforts made to minimize exposure to front line workers, facility structures, and the public. However, local efforts may quickly become exhausted and require external resource, care, and coordination assistance.

In the event that a Radiation MCI occurs it is most likely that local DES will take the lead coordination role. The SRHCC would fulfill a support role during any Radiation MCI. Support provided would be dependent on the needs identified by the health care agency and the capacity of the Coalition to fulfill those requests.

2.2 Notifications

Notification will be the responsibility of the responding agencies and participating healthcare facilities. The SRHCC will assist with communication and resource needs as requested.

2.3 Roles and Responsibilities

Local organizations and agencies within the impacted jurisdiction will have primary responsibility for response, including initial triage and casualty distribution.

The roles and responsibilities of the responding agencies and participating healthcare facilities will be determined by each individual entity. It is the responsibility of the entities to acquire and provide appropriate education and training. The SRHCC does not have the authority to dictate or recommend

roles and responsibilities but will provide education and training related to best practices in the care of exposed individuals.

2.4 Logistics

Logistics for space, staff and supplies is the responsibility of the responding agencies and participating healthcare facilities. The SRHCC will assist with resource needs as requested.

2.4.1 SPACE

Each facility should follow their own protocols for treating, holding, transporting, and transferring care in regards to exposed patients.

2.4.2 STAFF

Facilities are encouraged to utilize Montana Healthcare Mutual Aid System (MHMAS) as needed to request trained staff.

2.4.3 SUPPLIES

The SRHCC may assist with facilitating mutual aid to find supplies and resources, including transportation. This may include utilizing EMResource, existing MOUs, volunteer registry, and access to vendors to address resource shortages.

Critical care for patients should not be delayed if Tyvek suits or other PPE is not available. Gloves, N95 face masks, and long sleeve shirts (or Tyvek suits) would be sufficient PPE for most responders.

Radiation equipment for screening (pancake probes) will be necessary to screen and determine need for and effectiveness of decontamination for both patients, worried well, and workers. Plans for contamination assessment should include access to this equipment and training for staff who will use it.

2.5 Operations - Medical Care

Direction and recommendations for medical care are outside of the scope of the Montana Health Care Coalitions. Resources for the following categories of clinical care and emergency management needs associated with a radiation emergency will be included in Appendix 2:

- Triage and screening
- Patient care
- Treatment
- Safety and control measures
- Fatality management
- Transport
- Surveillance, tracking and situational awareness
- Rehabilitation and outpatient follow up services

2.6 Special Considerations

2.6.1 BEHAVIORAL HEALTH

In coordination with direct medical care, behavioral health care may be necessary to support patients and families impacted by an exposure to radiation. Plans should be enacted early in a radiation response to address and plan for behavioral health care needs as appropriate. Additionally, due to impact of treating individuals with radiation exposure, plans may be required to support a surge in behavioral health needs of patients, family members, community members, health care staff and employees during a radiation MCI. Health care organizations within the SRHCC should work together to facilitate information coordination and standardizations of resources provided to address behavioral health concerns based on the incident. Behavioral health response may need to continue long after a Radiation MCI response is demobilized.

2.6.2 PEDIATRIC

A radiation event may result in pediatric patients. It is critical that healthcare facilities have the education and resources necessary to assess and treat pediatric patients. Where telemedicine is not available, image sharing and provider-to-provider discussions can be used to assist in caring for a pediatric patient.

2.6.3 AT RISK POPULATIONS

Member organizations should account for community members who could be more vulnerable during a radiological emergency. Consideration should be made for supporting special interventions to ensure access to appropriate services and care.

2.7 Communications

The SRHCC will coordinate and disseminate timely, accurate, and consistent information to all affected members of the HCC, up to and including coordination efforts between HCC members, the state, the Joint Information Center, and other agencies as necessary.

2.8 Deactivation and Recovery

Indicators for incident conclusion include decreased patient volumes and near-normal levels of hospital staffing and supplies. When these indicators occur, demobilization efforts will be activated at the discretion of participating agencies with all appropriate stand-down measures initiated as needed. The Health Care Coalitions will provide guidance and support as able. These activities should include considerations for continuity of recovery efforts, the after-action report process, reimbursement, and analysis, and archiving of incident documentation.

SECTION 3: MAINTENANCE AND REVIEW

The SRHCC formally reviews all components of this plan annually. The Executive Committee offers advice and suggestions on appropriate emergency planning and construction of the document. This process allows the coalition to determine if it meets all essential factors, remains applicable, and affords the opportunity to update and change the plan as the coalition changes and grows.

Minor corrections, edits, updates, or adjustments to this document might occur on occasion without a formal review. Changes may also take place as part of the improvement plans from exercise after action reports. All changes are tracked in a versioning method and in the Record of Change log.

SECTION 4: APPENDICES

Appendix 1: Training and Exercises

Appendix 2: Additional Resources/References

Appendix 1: Training and Exercises

This plan or any of its components could be exercised separately or in conjunction with other exercises. Exercises will be used under simulated, but realistic, conditions to validate policies and procedures for responding to specific emergency situations and to identify deficiencies that need to be corrected. Personnel participating in these exercises should be those who will make policy decisions or perform the operational procedures during an actual event (i.e. critical personnel). Exercises are conducted under no-fault pretenses. The HCC will identify and share as many opportunities as possible. The Montana Regional Health care Coalitions will offer the following courses as able:

- Basic Disaster Life Support
- Advanced Disaster Life Support
- Advanced Burn Life Support

Appendix 2: Additional Resources and References

- Resource Links
- HAZMAT PPE Links
- Hazardous Materials References

Resource Links:

- [Download Mobile REMM - Radiation Emergency Medical Management \(hhs.gov\)](#)
- [RITN Exercises](#)
- [Strategic National Stockpile \(SNS\) - Radiation Emergency Medical Management \(hhs.gov\)](#)
- https://deq.mt.gov/files/Land/hazwaste/documents/HW_Transporters.pdf
- https://deq.mt.gov/files/Land/hazwaste/documents/HW_Consultants_Remediation_Firms.pdf
- <https://wrap-em.org/index.php/education/rad-surge-annex-workshop>
- <http://www.cwchealthcarecoalitions.org/wp-content/uploads/2016/10/HICS-254-Disaster-Victim-Patient-Tracking.pdf>

Hazmat PPE Links:

- [Personal Protective Equipment \(PPE\) in a Radiation Emergency - Radiation Emergency Medical Management \(hhs.gov\)](#)
- [EPA – Personal Protective Equipment](#)
- [OSHA Technical Manual \(OTM\) Section VIII: Chapter 1 Chemical Protective Clothing](#)
- [HAZMAT Suit Levels: How Many Are There?](#)
- [HAZMAT Suits – Levels of Protection](#)
- [10 things you need to know about chemical protection suits](#)
- [How To Choose Chemical Personal Protective Equipment](#)
- [NFPA Risk-Based Selection of Chemical Protective Clothing](#)
- [3 Steps To The Right Suit](#)
- [Choose the correct chemical suit with these 5 steps](#)