

# **TEPP Planning Products Model Needs Assessment Self Assessment Document**

Prepared for the Department of Energy Office of Transportation and Emergency Management



# Model Needs Assessment



## PURPOSE

The purpose of this Model Needs Assessment is to assist state, tribal, or local officials in determining emergency responder readiness for response to a transportation accident involving radioactive material.

## 1.0 INTRODUCTION

This Model Needs Assessment was developed by the Department of Energy's Transportation Emergency Preparedness Program (TEPP) as a planning and assessment tool for state, tribal, or local government officials. To implement this Model Needs Assessment, a designated official from the jurisdiction will conduct a self-assessment by answering various questions. By doing so, the official will determine strengths and identify improvement areas. To support the assessment process, and any proposed recommendations for improvement, this document includes descriptions of additional TEPP planning and training tools. These tools have been developed to assist state, tribal, and local officials in remedying any identified improvement areas. These additional resources can be found in Appendix A. This Model Needs Assessment includes both a format guide (Appendix B) and a sample content guide which follows in section 3.0.

Following the completion of the assessment process and the remedying of any identified improvement areas, a training drill or an exercise involving applicable emergency response organizations should be conducted. The drill or exercise will help to evaluate current emergency responder readiness. A typical drill or exercise effort will include participation from the following emergency response organizations (including both career and volunteer responders):

- Emergency Management Agency
- Emergency Communications Center
- Hazardous Materials Team
- Fire Response Organization
- Law Enforcement Response Organization
- Emergency Medical Services
- Hospital/Care Facility Procedures and Capabilities

In addition to state, tribal, and local agencies, the extent of play for the drill/exercise could also include support from the U.S. DOE.

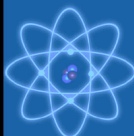


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## 1.1 ASSESSMENT ELEMENTS

The assessment portion of this document is designed to evaluate seven different emergency response elements, assessing each response element’s procedures and capabilities. The seven emergency response elements included in this Model Needs Assessment are:

- Emergency Management Agency
- Emergency Communications Center
- Hazardous Materials Team
- Fire Response Organization
- Law Enforcement Response Organization
- Emergency Medical Services
- Hospital/Care Facility Procedures and Capabilities

It is recommended that the assessment be conducted at each of the above-referenced facilities. Telephone interviews are also an option to expedite the assessment process.

## 2.0 ASSESSMENT EVALUATION

The following agencies/organizations have participated in this assessment:

Name	Representing	Phone Number

## 2.1 EMERGENCY MANAGEMENT PLANNING PROCEDURES AND CAPABILITIES

Are radioactive material used or shipped within your jurisdiction?

- Yes  No

If radioactive material is used or shipped within your jurisdiction, define the uses:

- |                                     |  |                                   |
|-------------------------------------|--|-----------------------------------|
| <input type="checkbox"/> Medical    | <input type="checkbox"/> Manufacturing | <input type="checkbox"/> Research |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agriculture   | <input type="checkbox"/> Waste    |
| <input type="checkbox"/> Spent Fuel | <input type="checkbox"/> Government    | <input type="checkbox"/> Other    |

## Model Needs Assessment



If radioactive material is used or shipped within your jurisdiction, define the mode of transport:

- Highway       Air       Rail       Water

Does your jurisdiction have an Emergency Operations Plan (EOP) that has an annex addressing response to a transportation incident involving radioactive material?

- Yes  No

Does the Emergency Operations Plan identify who the state Radiation Authority is?

- Yes  No

Does your jurisdiction's emergency management official have telephone contact numbers or alternate communication methods for contacting the Radiation Authority?

- Yes  No

Does your jurisdiction want an example of a model EOP annex for preparedness and response to a radiological transportation incident that identifies standard content for transportation emergency preparedness (TEPP Planning Tool)?

- Yes  No

As directed in Homeland Security Presidential Directive 5 (HSPD-5), have emergency management officials been trained in NIMS and the use of appropriate forms, procedures/checklists?

- Yes  No

Are all emergency management response vehicles equipped with a copy of the most current version of the DOT Emergency Response Guidebook?

- Yes  No

Has your jurisdiction conducted a hazardous materials drill within the past 12 months?

- Yes  No

Has it been greater than 3 years since responders conducted a drill or responded to an incident involving radioactive materials?

- Yes  No



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### 2.2 EMERGENCY COMMUNICATIONS CENTER PROCEDURES AND CAPABILITIES

Are 911 Center Call Taker/Dispatchers required to participate in minimum levels of training to meet local, state, or federal performance standards?

Yes  No

Have 911 Center Call Taker/Dispatchers been trained in the use of the Emergency Response Guidebook (ERG)?

Yes  No

Have 911 Center Call Taker/Dispatchers have a current copy of the ERG?

Yes  No

Do 911 Center Call Taker/Dispatchers have a method in place to contact local and state mutual aid support agencies?

Yes  No

Do the 911 Center Call Taker/Dispatchers routinely check/test the call-list/radio to confirm communication capabilities with the mutual aid support agencies?

Yes  No

Have 911 Center Call Taker/Dispatchers been trained to the appropriate level of the National Incident Management System (NIMS)?

Yes  No

Are 911 Center Call Taker/Dispatchers familiar with existing mutual aid agreements and have they tested these agreements during a drill or actual event?

Yes  No

Does each 911 Center Call Taker/Dispatchers position have an incident information form or computer system that is used to document information during emergencies?

Yes  No



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## 2.3 HAZARDOUS MATERIALS TEAM PROCEDURES AND CAPABILITIES

Does the County have a Hazardous Materials Team?

Yes  No

Has the Hazardous Materials Team completed a self-evaluation as outlined by EPA Regulation 540 G-90 003?

Yes  No

Has the Hazardous Materials Team been trained to the OSHA 29 CFR 1910.120 Technician Level?

Yes  No

Has the Hazardous Materials Team been trained for response to radioactive material incidents/releases?

Yes  No

Has the Hazardous Materials Team been trained for response to transportation incidents involving radioactive material?

Yes  No

Are the Hazardous Materials Team's services available 24-hours a day, 7 days a week?

Yes  No

Does the Hazardous Materials Team utilize an incident scene accountability system?

Yes  No

Are mutual aid agreements developed to support hazardous materials incidents?

Yes  No

Has the hazardous materials mutual aid agreement been exercised/practiced in the past year?

Yes  No

Does the Hazardous Materials Team have radiological survey instrumentation in its equipment inventory?

Yes  No

If yes, identify number of instruments, model, and manufacturer.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



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Is the monitoring equipment calibration current?

Yes  No

Is there a program in place to routinely test and maintain monitoring equipment calibration?

Yes  No

Has the Hazardous Materials Team been trained on the use of each type of radiological survey instrument, and is a program in place to maintain/demonstrate proficiency?

Yes  No

Has the Hazardous Materials Team developed response procedures that include a Site Safety Plan and Radiation Exposure Guidelines?

Yes  No

Does the organization want an example of a Hazardous Material Incident Response Procedure that includes a Site Safety Plan and Radiation Exposure Guidelines (TEPP Planning Tool)?

Yes  No

### 2.4 FIRE RESPONSE ORGANIZATION PROCEDURES AND CAPABILITIES

Are all emergency response vehicles equipped with the latest copy of the Emergency Response Guidebook?

Yes  No

As directed in Homeland Security Presidential Directive 5 (HSPD-5), have all Fire Response personnel been trained in NIMS and the use of appropriate forms, procedures/ checklists?

Yes  No

Have fire response organizations been trained to the OSHA 29 CFR 1910.120 Operations Level?

Yes  No

Have fire response organizations been trained for response to transportation incidents involving radioactive material?

Yes  No

# Model Needs Assessment



Do fire response organizations have standard operating procedures (SOPs) for response to transportation incidents involving radioactive material?

Yes  No

Does the assessment agency want a copy of a model response procedure for transportation incident involving radioactive materials (TEPP Planning Tool)?

Yes  No

Do fire response organizations utilize an incident scene accountability system?

Yes  No

Do fire response organizations have radiological survey instrumentation in their equipment inventory (not required)?

Yes  No

If yes, identify number of instruments, model, and manufacturer.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Is the monitoring equipment calibration current?

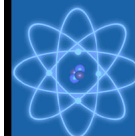
Yes  No

Is there a program in place to routinely test and maintain monitoring equipment calibration?

Yes  No

Have fire response organization personnel been trained on the use of each type of radiation instrument, and is a program in place to maintain/demonstrate proficiency?

Yes  No



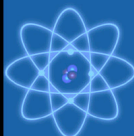
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## 2.5 LAW ENFORCEMENT RESPONSE ORGANIZATION PROCEDURES AND CAPABILITIES

Are all emergency response vehicles equipped with the most current version of the Emergency Response Guidebook?

Yes  No

As directed in Homeland Security Presidential Directive 5 (HSPD-5), have emergency management officials been trained in NIMS and the use of appropriate forms, procedures/ checklists?

Yes  No

Do law enforcement response organizations utilize an incident scene accountability system?

Yes  No

Have law enforcement response organizations been trained to the OSHA 29 CFR 1910.120 Awareness Level?

Yes  No

Have law enforcement response organizations been trained for response to transportation incidents involving radioactive material?

Yes  No

Do law enforcement response organizations have radiological survey instrumentation in their equipment inventory (not required)?

Yes  No

If yes, identify number of instruments, model, and manufacturer.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Is the monitoring equipment calibration current?

Yes  No

Is there a program in place to routinely test and maintain monitoring equipment calibration?

Yes  No

# Model Needs Assessment



Have law enforcement response organization personnel been trained on the use of each type radiation instrument, and is a program in place to maintain/demonstrate proficiency?

Yes  No

## 2.6 EMERGENCY MEDICAL SERVICES PROCEDURES AND CAPABILITIES

As directed in Homeland Security Presidential Directive 5 (HSPD-5), have EMS/Care Facility personnel been trained in NIMS and the use of appropriate forms, procedures/checklists?

Yes  No

Have EMS personnel been trained in the use of the Emergency Response Guidebook?

Yes  No

Are all EMS response vehicles equipped with a copy of the most current version of the Emergency Response Guidebook (ERG)?

Yes  No

Has the EMS response organization been trained on treatment and transportation of a potentially radiologically contaminated patient?

Yes  No

Does the EMS response organization have a procedure for the handling and packaging of a potentially radiologically contaminated patient?

Yes  No

Does the EMS response organization utilize an incident scene accountability system?

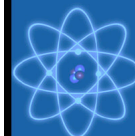
Yes  No

Do EMS response organizations have radiological monitoring equipment as part of their equipment inventory (not required)?

Yes  No

If yes, identify number of instruments, model, and manufacturer.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

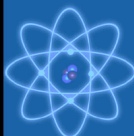


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# Model Needs Assessment



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Is the monitoring equipment calibration current?

Yes  No

Is there a program in place to routinely test and maintain monitoring equipment calibration?

Yes  No

Have EMS personnel been trained on the use of each type radiation instrument, and is a program in place to maintain/demonstrate proficiency?

Yes  No

Has a drill been conducted utilizing a scenario involving a radiologically contaminated patient within the past 12 months?

Yes  No

Has a drill been conducted utilizing a scenario involving a radiologically contaminated patient within the past 3 years?

Yes  No

Have EMS personnel worked with the Medical Examiner/Coroner on determining the disposition of radiologically contaminated body/human remains?

Yes  No

Does the EMS organization have a procedure for handling radiologically contaminated body/human remains?

Yes  No

## 2.7 HOSPITAL/CARE FACILITY PROCEDURES AND CAPABILITIES

Does the hospital have an Emergency Operations Plan that contains information on how to respond and treat a radiologically contaminated or irradiated patient(s) or how to disposition a contaminated body or human remains?

Yes  No

As directed in Homeland Security Presidential Directive 5 (HSPD-5), have hospital personnel been trained in NIMS and the use of appropriate forms, procedures/checklists?

Yes  No

# Model Needs Assessment



Have hospital personnel been trained in the handling, decontamination, and treatment of radiologically contaminated patients?

Yes  No

Does the hospital emergency department have radiological monitoring equipment as part of their equipment inventory?

Yes  No

If yes, identify number of instruments, model, and manufacturer.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Is the monitoring equipment calibration current?

Yes  No

Is there a program in place to routinely test and maintain monitoring equipment calibration?

Yes  No

Have EMS personnel been trained on the use of each type radiation instrument, and is a program in place to maintain/demonstrate proficiency?

Yes  No

Does the hospital have a Nuclear Medicine Department?

Yes  No

Is there a process in place to have the hospital Radiation Safety Officer or Nuclear Medicine Technician available to assist Emergency Department Staff in surveying potentially contaminated patients if needed?

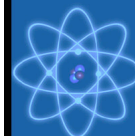
Yes  No

Has a drill involving local responder agencies been conducted within the past 12 months?

Yes  No

Has a drill been conducted utilizing a scenario involving a radiologically contaminated patient within the past 3 years?

Yes  No

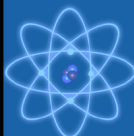


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## 3.0 TRAINING EVALUATION CHECKLIST

When conducting this section of the assessment, consider the training of all response elements. This section will assist the assessment authority in identifying topics that are not being provided in existing training programs. Upon completion of this section, the assessment authority will be able to identify training areas in need of improvement. The authority can then provide recommendations on which DOE-developed training materials can be used to augment existing training.

### 3.1 AWARENESS AND OPERATIONS LEVEL RADIOLOGICAL TRAINING

The checklist in Section 3.1 below corresponds with the objectives outlined in the DOE’s Modular Emergency Response Radiological Transportation Training (MERRTT) program. MERRTT meets the radiological-specific competencies of the National Fire Protection Association’s (NFPA) standard NFPA 472 for awareness and operations level trained responders.

#### RADIOLOGICAL BASICS

Upon completion of this module, you will have a better understanding of the basic structure of an atom and the fundamentals of radiation.

	EMA	HMT	FD	LE	EMS
Identify the basic components of an atom.					
Identify the four basic types of ionizing radiation.					
Define ionizing radiation, radioactivity, radioactive material, and radioactive contamination.					
Distinguish between radiation exposure and radioactive contamination.					

#### BIOLOGICAL EFFECTS

The purpose of this module is to increase your understanding of how ionizing radiation affects the human body. This knowledge will help you, as a responder, function with confidence during incidents that involve radioactive material.

	EMA	HMT	FD	LE	EMS
Define acute and chronic radiation doses.					
Identify ways that radioactive material can enter the body.					
Identify the potential health effects of radiation exposure.					

# Model Needs Assessment



## RADIOACTIVE MATERIAL SHIPPING PACKAGES

The purpose of this module is to provide you with a basic understanding of the types of packages used to transport radioactive material and the potential hazard posed by the material contained within these packages. This information will help increase your knowledge of appropriate responses to a radiological transportation incident.

	EMA	HMT	FD	LE	EMS
Identify typical packages used in the transport of radioactive material.					
List examples of radioactive material that are shipped in various shipping packages.					
Identify the risks associated with the various shipping packages.					
Identify the testing methods for Type A and B Packages.					
Identify some commonly transported sources of radioactive material.					

## HAZARD RECOGNITION

The purpose of this module is to increase your understanding of package markings, warning labels, and placards used for packaging and shipping radioactive material.

As an emergency responder, you need to be aware of radioactive material present at an accident scene. Understanding radioactive material marking, labeling, and placarding requirements will help you properly assess accident scenes and respond appropriately.

	EMA	HMT	FD	LE	EMS
Identify terminology and acronyms associated with shipments of radioactive material.					
Identify markings on packages used to transport radioactive material.					
Identify labels on packages used to indicate the presence of radioactive material.					
Identify placards used on radioactive material shipments.					
Identify the information contained on shipping papers used for transporting radioactive material.					
Identify commonly used Proper Shipping Names for radioactive material.					

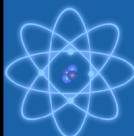


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# Model Needs Assessment



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## INITIAL RESPONSE ACTIONS

The purpose of this module is to provide a basic understanding of the initial actions you should take when arriving at a scene of a radioactive material transportation incident.

Your ability to effectively identify the hazard using the ERG will enhance your efficiency in responding to the incident.

	EMA	HMT	FD	LE	EMS
Identify the actions required by "Safety, Isolation, and Notification."					
Locate, in the U.S. Department of Transportation Emergency Response Guidebook (ERG), the response guide for radioactive material by using one or all of the following: UN identification number, material name, or shipment placards.					

## PATIENT HANDLING

The purpose of this module is to help you assess the potential risks in handling contaminated patients at a radioactive material transportation incident. This module will aid you in preparing patients for transport from the incident scene to the hospital.

	EMA	HMT	FD	LE	EMS
Identify the risks to response personnel when rescuing injured persons at a radioactive material transportation incident.					
Identify the importance of gross decontamination for radiologically contaminated patients.					
Identify methods for preparing radiologically contaminated patients for transport to the hospital.					

## INCIDENT CONTROL

The purpose of this module is to help you understand the importance of conducting a proper hazard assessment at the scene of a transportation accident involving radioactive material. Understanding the hazards at the scene will help you establish effective control zones, select appropriate PPE, and protect on-scene personnel from radiation and contamination.

	EMA	HMT	FD	LE	EMS
Identify the basic steps for identification and hazard assessment at the scene of a transportation incident involving radioactive material.					
Describe reasons for and methods of establishing hot, warm, and cold zones at the scene of a transportation incident involving radioactive material.					
Describe methods for implementing radiological controls at the scene of a transportation incident involving radioactive material.					
Identify ways to control the spread of contamination while taking defensive measures to limit impacts of an incident involving radioactive material.					
Identify factors to consider when implementing public protective actions and crowd control at the scene of a transportation incident involving radioactive material.					

# Model Needs Assessment



## RADIOLOGICAL SURVEY INSTRUMENTS AND DOSIMETRY DEVICES

The purpose of this module is to provide you with a general awareness and understanding of radiological survey instruments and how they can be used to survey for radiation exposure and contamination. Proper use of radiological survey instruments will provide you with more information on the hazards present at the scene.

	EMA	HMT	FD	LE	EMS
Identify two categories of radiological survey instruments.					
State the proper application and limitation of contamination survey instruments.					
Identify a method for checking for the presence of removable contamination.					
State the proper application and limitation of radiation exposure survey instruments.					
Identify the maximum radiation levels expected on shipping packages and/or transport vehicles.					
Identify commonly used dosimetry devices.					

## TRANSPORTATION OF SAFEGUARDS MATERIAL

The purpose of this module is to familiarize emergency response personnel with the system that is in place for transporting nuclear weapons, nuclear weapons components, and special nuclear materials.

	EMA	HMT	FD	LE	EMS
Identify the types of material being transported by the Department of Energy's Office of Secure Transportation.					
Identify the types of vehicles used and the personnel who provide escort during over-the-road transport of safeguards material.					
Identify the safety measures used by OST to ensure the safe transport of safeguards material.					
Identify the protective actions used in the event of an incident involving safeguards material.					



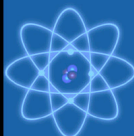
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## DOE SHIPMENTS AND RESOURCES

The purpose of this module is to increase your understanding of the DOE’s transportation activities. Understanding the types of materials and wastes shipped by DOE will enable you to respond confidently to a transportation accident involving radioactive material shipped by DOE. Knowledge of available resources will make a response more efficient and effective.

	EMA	HMT	FD	LE	EMS
Identify the types of radioactive material transported by the DOE.					
Identify the transportation modes used by DOE to transport radioactive material.					
Identify the enhanced safety measures used by DOE.					
Identify federal response agencies/resources that provide assistance to on-scene responders.					

## DECONTAMINATION, DISPOSAL, & DOCUMENTATION

The purpose of this module is to inform you of methods used to decontaminate personnel and equipment. This information will help you prevent further spread of radiological contamination and minimize the amount of radioactive waste generated when performing response activities at the scene of a transportation incident involving radioactive material.

	EMA	HMT	FD	LE	EMS
Identify how personnel, personal protective equipment, apparatus, and tools become contaminated with radioactive material.					
State the purpose of radioactive material decontamination.					
Identify the four recommended decontamination stations or processing steps.					
Identify your responsibilities for radioactive material disposal and event documentation.					

# Model Needs Assessment



## WASTE ISOLATION PILOT PLANT

The purpose of this module is to increase your knowledge of the Waste Isolation Pilot Plant and its transportation system. Having an understanding of the material being transported to WIPP and how it is transported will increase your ability to quickly recognize, safely respond, and accurately relay information during an accident involving WIPP material.

	EMA	HMT	FD	LE	EMS
State the importance of the Waste Isolation Pilot Plant (WIPP).					
Identify large quantity transuranic waste generator sites.					
Identify waste verification techniques.					
Identify the characteristics of the waste transported to WIPP.					
Identify the packages used to transport waste to WIPP.					
Identify the enhanced safety measures used to transport waste to WIPP.					

## PRE-HOSPITAL PRACTICES

The purpose of this module is to increase your understanding of unique aspects of pre-hospital patient care during a radioactive material transportation incident. This knowledge will help you, as a responder, function with confidence during incidents that involve radioactive material.

	EMA	HMT	FD	LE	EMS
Identify personal protective attire for responders.					
Identify patient management actions based on acceptable medical practices.					
Identify techniques for patient transfer to medical facility.					
Demonstrate proper procedures for returning personnel, equipment, and vehicles to service.					

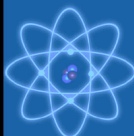


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# Model Needs Assessment



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## TRANSPORTATION BY RAIL

The purpose of this module is to increase your knowledge of the transportation of radioactive material by rail. Rail accidents involving radioactive material present unique problems and challenges for responders. Having an understanding of the material being transported by rail and how it is transported will increase your ability to quickly recognize, safely respond, and accurately relay information during a rail accident involving DOE-owned radioactive material.

	EMA	HMT	FD	LE	EMS
List examples of radioactive material the DOE transports by rail.					
List the information resources available to the responder at a rail transportation incident.					
Identify the key elements of the Federal Railroad Administration's Safety Compliance Oversight Plan.					
Identify the unique aspects of responding to a rail accident involving radioactive material.					

## INCIDENT COMMAND

The purpose of this module is to incorporate and institutionalize NIMS as mandated by Homeland Security Presidential Directive/HSPD-5 and provide you with an understanding of the actions that should be considered during the management of an incident involving radioactive material. This module will help you realize that a successful mitigation involves proper notification, planning, and documentation of incident activities.

	EMA	HMT	FD	LE	EMS
Identify the role of the Incident Command System in the National Incident Management System.					
Define two types of public protective actions the IC can implement at the scene of a transportation incident involving radioactive material.					
List local, state, and federal agencies that can provide support to the IC during a transportation incident involving radioactive material.					
List issues that should be considered during development of a recovery plan.					
Identify common post-incident concerns that the IC should consider.					

# Model Needs Assessment



## PUBLIC INFORMATION OFFICER

The purpose of this module is to provide the PIO with the necessary information to successfully communicate to the public the events and outcomes of the incident. You may not necessarily be an expert on radiological principles so this module will inform you of the basic concepts. This should enable you to more effectively communicate necessary information to the media and public, thereby ensuring they are adequately and correctly informed during a transportation incident involving radioactive material.

	EMA	HMT	FD	LE	EMS
Identify public concerns and perceptions about incidents involving radioactive material.					
Identify basic messages that should be delivered to the media and the general public during a transportation incident involving radioactive material.					
Identify emergency public information sources available to support an incident response.					
Identify agencies that will require public information coordination during a response to an incident involving radioactive material.					

### 3.2 TECHNICIAN LEVEL RADIOLOGICAL TRAINING

The MERRTT program is the DOE’s based radiological training program and it targets awareness and operations level response, if your agency believes it needs training beyond the awareness and operations levels, DOE does offer an 8-hour radiological training program which, when combined with MERRTT, meets the NFPA 472 radiological-specific technician level competencies in addition to *Competencies for Responders Assigned Radiological Agent-Specific Tasks*.

Is your jurisdiction is interested in receiving technician level radiological training?

Yes  No

### 3.3 SPECIALIST LEVEL RADIOLOGICAL TRAINING

The MERRTT program is the DOE’s based radiological training program and it targets awareness and operations level response, if your agency believes it needs training beyond the technician level, DOE does offer a 40-hour radiological training program which meets the NFPA 472 *Competencies for the Technician with a Radioactive Material Specialist*.

Is your jurisdiction is interested in receiving specialist level radiological training?

Yes  No



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## Model Needs Assessment

### 4.0 SAMPLE DISCUSSIONS AND RECOMMENDATIONS

This section of the assessment identifies recommendations or actions necessary to improve planning and training skills/capabilities for emergency responders (emergency management personnel, hazardous materials teams, fire, law enforcement, and emergency medical service). Using the results of the previous sections, describe identified improvement areas and develop recommendations that, upon implementation, will improve responder capabilities for response to a transportation accident involving radioactive material. Several examples are provided below:

#### Discussion and Recommendations for Emergency Management Planning

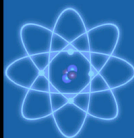
With the exception of an annex for transportation incidents involving radioactive material, the county has an Emergency Operations Plan that addresses typical disasters/emergencies. Using a model provided by the DOE TEPP, an annex for transportation incidents involving radioactive material was developed and has been provided to the county for review, comment, and eventual incorporation into the existing county Emergency Operations Plan. Emergency management officials have reviewed the provided DOE TEPP Model Annex for Preparedness and Response to a Radiological Transportation Incident. This review determined that the provided model format and contents would assist the county in the development of an annex for transportation accidents involving radioactive material.

Discussions with state officials indicate a willingness to also evaluate the DOE TEPP Model Annex. This evaluation, including comment and revision to the TEPP Model Annex is ongoing at the time of this draft report.

Recommendation—Utilize the DOE TEPP Model Annex for state/local Emergency Operations Plans to develop an Annex for Transportation Accidents Involving Radioactive Material.

#### Discussion and Recommendations for Capabilities

The County has a Hazardous Materials Team that provides around-the-clock response capabilities. The team is supported by typical hazardous materials training and response equipment. Currently, all members meet OSHA 29 CFR 1910.120 Technical Level Training Requirements. The equipment cache for radiological response should be re-evaluated. An adequate number of radiological monitoring instruments (9) are available for a radiological transportation accident. However, the instrumentation available requires



## Model Needs Assessment



calibration and should be evaluated to determine if some existing instruments could be replaced with more current models/units. Mutual Aid agreements for additional support are developed and approved by neighboring counties.

Recommendation—Re-evaluate currently available radiological monitoring equipment, determine calibration needs, and the possibility of replacing some existing instruments with more current models/units.

### Discussion and Recommendations for Law Enforcement Training

Based on response to the assessment questions concerning existing training programs associated with transportation accidents involving radioactive material, the following discussion and recommendations are provided.

Through the assessment process and discussions with law enforcement officials, it was determined that each law enforcement recruit receives hazardous materials training as part of their initial qualifications. The hazardous materials training is general in nature but does include the use of the ERG. After completion of the recruitment training program, each law enforcement officer routinely receives refresher training. However, existing refresher training programs do not include specifics on responding to transportation accidents involving radioactive material.

Based on discussions with law enforcement officials, it was identified that an Awareness Level Training Program for law enforcement officers would be useful. Law enforcement officials also expressed that due to limited training hours, available training programs should be packaged in a delivery system (video, slides, or handouts of 30 minute or less). By developing training in this format/delivery system, the training could be conducted during daily lineup activities or specially called meetings/activities.

Recommendation—Have law enforcement complete training modules at the awareness Level and establish a regular refresher training cycle.

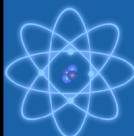


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# Model Needs Assessment



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## 5.0 SIGNATURE PAGE

Include signatures from organizational authorities (Police and Fire Chiefs, Emergency Management Director, State Radiation Authority Supervisor, Hazardous Materials Team Chief, Emergency Medical Service Chief and Authority conducting the assessment).

The information included in this assessment is current and accurate to the best of each assessment team participant’s knowledge.

_____	_____
Police Chief	Date
_____	_____
Fire Chief	Date
_____	_____
Emergency Management Director	Date
_____	_____
Emergency Medical Service Chief	Date
_____	_____
State Radiation Authority Supervisor	Date
_____	_____
Hazardous Materials Team Chief	Date
_____	_____
Emergency Medical Services Chief	Date
_____	_____
Conducting Authority	Date

## ATTACHMENTS

This section should include a list of attachments that have been considered useful and have become part of the report. Examples of the Model Plans and Procedures can be viewed on the U.S. Department of Energy Web Site ([www.em.doe.gov/otem](http://www.em.doe.gov/otem)).

# Model Needs Assessment



## APPENDIX A (TEPP RESOURCES)

### Needs Assessment

This model assessment provides evaluation criteria to assist state, tribal, or local officials in determining responder readiness for response to a transportation incident involving radioactive material. The assessment process assists jurisdictions in determining strengths and identifying possible improvement areas within various response organizations (emergency management services, emergency communications center, hazardous materials team, fire response organizations, law enforcement response organizations, and emergency medical services/care facilities).

### Offsite Emergency Plan Model

A model transportation Emergency Operations Plan that integrates the FEMA REP 5 guidance is available for use. The model plan leads a planner through step-by-step development, resulting in a FEMA-consistent emergency operations plan for state, local and tribal organizations. The model provides both format and content guides.

### Response Procedure Models

The response model procedures provide guidance to first response organizations that do not have specific procedures addressing response to a transportation incident involving radioactive material. There are five model procedures in available for use and include:

- First Response Procedure for Radiological Transportation Accidents
- HazMat Incident Response Procedure
- EMS Procedure for Proper Handling and Packaging of Potentially Contaminated Patients
- Medical Examiner/Coroner Procedure for Proper Handling of Potentially Contaminated Human Remains
- Hazardous Materials Decontamination Procedure

The First Response Procedure for Radiological Transportation Accidents uses a flow chart format to provide first responders with guidance for response to a transportation incident involving radioactive material. It includes life saving, fire-fighting and radioactive material considerations as well as Incident Command and size-up guidelines.

HazMat Incident Response Procedure provides guidance for responding to transportation incidents involving radioactive material or other hazardous materials. It includes site safety plan information, exposure guidelines, and forms to document response activities.



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## Model Needs Assessment

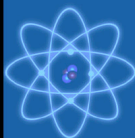
The EMS Procedure for Proper Handling and Packaging of Potentially Contaminated Patients provides guidance to EMS care providers for properly handling and packaging potentially radiologically contaminated patients. It includes decontamination area set up guidance, gross decontamination instructions, as well as patient handling and packaging instructions.

The Medical Examiner/Coroner Procedure for Proper Handling of Potentially Contaminated Human Remains identifies precautions and provides guidance to Medical Examiners/Coroners on the handling of a body or human remains that are potentially contaminated with radioactive material.

The Hazardous Materials Decontamination Procedure provides guidance for performing decontamination of individuals who have entered the “hot zone” during hazardous material incidents involving radioactive materials. It is designed to assist responders in determining an appropriate method for decontamination of responders where radioactive material as well as other hazardous material contaminants may be present. The procedure covers both wet and dry decontamination methods and includes a flow chart to assist in determining which decontamination method to use.

### **Tabletops/Drills/Exercises**

A manual containing five scripted transportation exercise scenarios has been developed. Each scenario provides a different type of transportation incident that may or may not include the release of radioactive materials. In addition to the exercise scenarios, a guidance document titled: “Guide to Conduct of Tabletops/Drills/Exercises” was developed to accompany the materials and provide step-by-step instructions on how to use the pre-scripted scenarios and tailor them to meet individual needs. Other supporting documents include sample drill schedules, facilitator materials for tabletop exercises, and a medical message index document containing 43 medical messages for various types of injuries.



# Model Needs Assessment



## APPENDIX B (FORMAT GUIDE)

A Model Needs Assessment should have the following components:

### 1.0 Introduction

A typical introduction would describe the reason for conducting the assessment and what services are being assessed. A list of participants from each organization interviewed during the assessment process should be included.

### 2.0 Assessment Evaluation

In this section, list the organizations that participated in the Needs Assessment. The following organizations should complete the assessment questionnaire applicable to each individual organization:

- 2.1 Emergency Management Agency
- 2.2 Emergency Communication Center
- 2.3 Hazardous Materials Team
- 2.4 Fire Response Organization
- 2.5 Law Enforcement Response Organization
- 2.6 Emergency Medical Services
- 2.7 Hospital/Care Facility Procedures and Capabilities

### 3.0 Training Evaluation/Checklists

Complete the training evaluation/checklist provided in the Model Needs Assessment for all emergency response organizations

### 4.0 Discussions and Recommended actions

This section would identify any recommendations or actions necessary to improve planning and training skills/capabilities for emergency responders. It should identify the method for improving responder skills/capabilities. It should also include a description of the need for development of specific emergency response plans and procedures

### 5.0 Signature Page

A typical signature page would comprise signatures from organizational authorities, including police chief, fire chief, emergency management director, state radiological supervisor, hazardous materials team chief, emergency medical services chief, and the authority conducting the assessment.



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