

# Colorado Department of Public Health and Environment

# **Hazard Analysis Toolkit**

For Health Care Facilities in Colorado

This toolkit is designed to help facilities conduct a quick, easy hazard analysis in the State of Colorado. It is intended for use in conjunction with the development of an Emergency Operations Plan for the facility and may be used as an orientation to Emergency Planning for staff.

### September 2008

Version 01.LTC.C

## WELCOME LETTER

September 2008

Dear Facility Administrator:

As part of the 2007 Performance Audit of Nursing Facility Quality of Care, the State of Colorado identified emergency operations planning as one major area for potential improvement and growth. In response, the Health Facilities and Emergency Medical Services Division (HFEMSD) at the Colorado Department of Public Health and Environment (CDPHE) is developing a series of resources to aid health care facilities in the development, implementation and maintenance of emergency operations plans (EOP). This toolkit is the first of several resources that will be made available.

This toolkit is designed to help facilities complete an accurate and useful hazard analysis in a timely fashion. A hazard analysis is the foundation of good emergency planning and development. Without a clear understanding of the hazards a facility might encounter, and the associated risks of those hazards, an emergency plan cannot hope to accurately target and address a facility's vulnerability.

The development of a hazard analysis is generally a time-consuming process, involving extensive research into the history of the area in question. Research includes interviewing local populations, extensive scientific surveys, and the collection of data from archives about natural and technological disasters such as floods, tornados, blizzards, earthquakes, wildfires, or severe industrial accidents. Detailed technical information about roads, bridges, transportation lines, and urban planning are included. Finally, using partnerships with the State and Federal government, current intelligence estimates establish the suspected terrorist risk for the area. All of these components combine together to make up the contents of the hazard analysis, which then identifies which of the hazards are most severe for a given target location. This toolkit has pre-gathered the relevant hazard information by region, using the Colorado hazard analysis and EOP. It also includes definitions of the potential hazards identified for the State and for health care facilities.

After completing this toolkit, facilities will have a clear understanding of the hazards which threaten their facility specifically, as well as the natural hazards that present a regional threat to the community. These resources are also available online in a variety of formats on the State health department website (<a href="www.healthfacilities.info">www.healthfacilities.info</a>) under the "Emergency Planning Resource" link. When the charts are downloaded and completed in Microsoft Excel, they auto-complete any computations required. Finally, this toolkit provides a useful orientation to the concepts of emergency planning, incident command, and National Incident Management System compliancy, and can be completed multiple times by different members of the staff as a training module.

Please feel free to contact the plan developers using the contact information below with questions, comments, concerns, or suggestions.

Best of luck with the planning process!

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# Introduction

### WHAT IS A HAZARD ANALYSIS?

A Hazard Analysis is an in-depth examination of all potential disasters, both natural and manmade, that may affect a given community and the potential impacts of those disasters. The analysis is a foundation in emergency operations planning, as it tailors the focus of disaster planning towards the most relevant or likely hazards. For example, Colorado exhibits a negligible risk from hurricanes but a very high-risk from blizzards, whereas Florida hazard analysis reflects nearly opposite results. Therefore, the specifics of an emergency operations plan (EOP) would be different in each state, even if the basic plan were the same.

### WHAT IS THIS TOOLKIT FOR?

The purpose of this toolkit is to help an individual health care facility conduct a reasonable, accurate hazard analysis in a short amount of time. The toolkit draws on many pre-established datasets and resources to help minimize the research time required to complete the analysis, and makes some general assumptions based on geography and Colorado's Hazard Analysis (located in the Colorado Emergency Operations Plan) to address many of the State's natural disasters. The toolkit also provides definitions for the hazards included in this assessment, and a list of common acronyms. These resources are located at the end of the document.

The toolkit has four main sections:

### 1. THE READINESS RATING WORKSHEET

This section asks a series of simple **YES or NO** questions to help the facility identify how ready they are to cope with a hazard or disaster in their community. This is also a useful orientation to emergency planning. A scorecard at the end of the worksheet presents the data in an easy to read, single page format.

### 2. THE HAZARD ANALYSIS WORKSHEET

This section asks the facility to rate the likelihood that a given disaster or hazard will affect them specifically. The rating is simple: a 1 means the risk is very low, a 2 means the risk is possible but not probable, and a 3 means the risk is very high. This rating system is used throughout the hazard analysis process and matches the Colorado rating system.

### 3. THE RISK ASSESSMENT PLANNING MATRIX

This section pulls all of the information gathered in the first two sections into an easy-to-read chart to quickly identify the greatest risks to the facility. This matrix is a critical tool in emergency plan development.

### 4. THE QUARTERLY EXERCISE SCHEDULE

Planning for disasters is important. Exercising and practicing those plans is even more important. This tool helps the facility practice the most important disaster response techniques each year. Like the **Risk Assessment Planning Matrix**, this tool is also part of the emergency operations plan.

### WHY SHOULD FACILITIES CARE ABOUT HAZARD ANALYSIS?

Facilities in the State of Colorado fall under two separate but related legal requirements to conduct a hazard analysis as part of their emergency operations planning. Federal regulations outlined in 42 CFR 483.75(m) states that "the facility must have detailed written plans and procedures to meet all potential emergencies and disasters, such as fire, severe weather, and missing residents." State regulations, found in 6 CCR 1011-1, Chapter V, part 13.2 state that "...the facility shall develop written policies and procedures for protection of persons within the building in case of fire, explosion, flood, staff shortage, food shortage, termination of vital services, or other emergency in the building." This is further clarified in 6 CCR 1011-1, Chapter V, Part 13.3, which notes that "(e)ach facility shall develop a written mass casualty plan for managing residents and treating casualties in an external or community disaster."

Conducting a Hazard Analysis as part of the development and tailoring of a facility's EOP meets these requirements.

### HOW DOES A FACILITY CONDUCT A HAZARD ANALYSIS?

Follow the instructions and worksheets provided in this toolkit to conduct a very simple, fast and effective Hazard Analysis of the facility. Begin on page one (1) and work through until the end. The toolkit works for any size or type of facility, and allows for the inclusion of requirements set by corporate facilities and other outside influences. When the toolkit is completed, place it in the "Hazard Analysis" section in the facility's EOP. Please note that the legal references in version 01.LTC.C specifically target long-term care facilities.

### WHO SHOULD COMPLETE THE TOOLKIT?

The toolkit should be filled out by the facility's administrator, the facility's emergency planner, the facility emergency planning team, or by a responsible party delegated by the facility's administrator. See 42 CFR 483.75(d) and 6 CCR 1011-1, Chapter V, Part 2 for further clarification of authority and responsibility of disaster planning in long-term care facilities.

### HOW LONG DOES THIS TOOLKIT TAKE TO COMPLETE?

The toolkit should take between thirty and ninety minutes to complete, depending on the size of the facility. Gathering the following items will help make the process faster:

- The facility's current EOP, or any other existing disaster planning documents
- Any record of fire drills, disaster trainings, or other preparation measures the facility has already established
- A copy of the emergency and evacuation plan located at the nurses' stations
- Any other relevant information

### HOW OFTEN SHOULD THE FACULTY COMPLETE THIS TOOLKIT?

The toolkit should be worked each time the EOP is updated, or once yearly.

### IS THIS DOCUMENT 'CONFIDENTIAL'?

Emergency planning documents are considered public. However, they may contain information that is sensitive to the facility. Therefore, it is recommended emergency documents carry a "sensitive" or "confidential" note to restrict the unintended distribution of the material to resources outside the facility.

# SECTION ONE: THE READINESS RATING WORKSHEET

# THE READINESS RATING WORKSHEET

### WHAT IS THE READINESS RATING WORKSHEET?

This worksheet is the first step in conducting a hazard analysis. By asking a series of simple **YES or NO** questions, the Readiness Rating Worksheet helps identify existing strengths and weaknesses for the facility. The worksheet also provides an overview orientation to emergency planning, and is a useful tool for those new to emergency planning concepts.

The worksheet is divided into the four major areas of disaster management and emergency planning: **Prevention**, **Preparedness**, **Response**, and **Recovery**. Each section includes a brief definition and explanation of the area's role in emergency planning. At the end of the worksheet is a **Readiness Rating Scorecard**, a convenient, one-sheet chart that quickly identifies the strengths and weaknesses of the facility for planning purposes.

### **SECTION ONE: PREVENTION**

"Prevention" refers to all possible steps a society takes to prevent disasters and emergencies from occurring. Though disasters are impossible to prevent entirely (for example, no one can control the weather), many things that make disasters worse can be circumvented through active planning and pre-emptive control of potentially hazardous situations. This process is called *mitigation*, and much of the next part of the checklist will help identify areas where the facility is already preventing and mitigating disasters, as well as areas where more development and practice might be needed. It may be useful to gather inspection records, previous safety reports, and current emergency plans or procedures before beginning this section.

### **Safety Inspections**

Safety inspections are part of the certification process for facilities that receive Medicaid and Medicare funding. Safety inspections also fulfill State and Federal regulations for life safety and fire codes and licensing.

Using the facility's official inspection logs, please determine whether the following systems have been inspected within the last year and check **YES** or **NO**.

		YES	NO
Elevators and Stairwells			
Emergency Exits			
Fire Alarms			
Fire Extinguishers			
Smoke Detectors			
Sprinklers			
	Totals:		

### **Emergency Operations Plan**

An Emergency Operations Plan (EOP) is the go-to guide for all hazards and disasters that might affect a facility. The plan should be *All-Hazards* in nature, meaning that the basic emergency response of the facility is the same for any disaster. Based on the hazard analysis, specific plans for the most likely disasters should also be included, and several of these specific plans are mandated by State and Federal regulations. The EOP should be *scalable*, meaning the plan can be adapted to incidents of any size or severity. The plan must be reviewed and updated on an annual basis to ensure the information is current and accurate. Also, the plan must be exercised regularly so that staff and residents are familiar with their roles during an emergency.

Please check YES or NO for each of the following questions regarding the facility's EOP:

		YES	NO
Base Plan:	Does the facility have an Emergency Operations Plan?		
	Has the plan been reviewed and updated in the last year?		
	Is there an official log for recording reviews, changes, or updates in the plan?		
Hazard Analysis:	Was a Hazard Analysis conducted as part of the plan?		
	Does the plan address all hazards the facility is likely to encounter based on the hazard analysis?		
Plan Contents:	Does the plan include the following:		
	Evacuation Plan		
	Shelter in Place Plan		
	Call-Down List		
	Staff Roles and Responsibilities or ICS roles		
Specific Hazards:	Are there plans for the following specific hazards: 42 CFR 483.75(m)1 and 6 CCR 1011-1, Chapter V, part 13		
These specific hazards are	Tornados		
listed in State or Federal regulations and must be	Winter Storms/Blizzards		
included in the EOP. These plans must also be	Facility Fires		
posted at nursing stations	Missing Residents		
and relevant security stations in the facility.	Wildfires		
42 CFR 483.75(m)2, 6 CCR	Flood		
1011-1, Chapter V, part 2.3 and LSC 18.7.1.1	Loss of Vital Services		
(existing) or LSC 19.7.1.1	Explosion in the facility		
(new).	Food Shortages		
	Staff Shortages		
	Totals		

### **SECTION TWO: PREPAREDNESS**

"Preparedness" refers to the steps a facility takes to be ready for disasters that occur despite the best prevention and mitigation efforts. Preparedness helps ensure the facility survives the disaster and the immediate aftermath period when outside assistance may be delayed. Many of these steps make up the base plan in the EOP and should be regularly reviewed and exercised with staff. This section examines the clarity of responsibilities within the facility, the level of self-sustainability of the facility in a disaster, and how often the facility practices for disasters. It might be useful to gather drill and training records, supply lists, evacuation plans, command charts, call-down lists, and existing emergency procedures before beginning this section.

### **ICS/Staff Responsibilities**

Establishing clear staff responsibilities during a crisis streamlines the decision-making process, helps prevent chaos, and increases the effectiveness of response plans. Utilizing the Incident Command System/Structure (ICS) increases the effectiveness even more.

Please check **YES** or **NO** for the following ICS/Staff Responsibilities questions:

		YES	NO
Critical Staff	Are the critical staff in the facility identified?		
	Are there at least two back-ups for each critical function on each shift?		
	Are the critical staff aware of their roles in an emergency?		
ICS Training	The following courses are available online from FEMA and help the staff to understand ICS and emergency planning. Please indicate whether the critical staff have taken the following courses:  (website: http://training.fema.gov/IS/)		
	IS-100.HC Introduction to the Incident Command System for Healthcare/Hospitals (est. 2.5 hours)		
	IS-197.SP <u>Special Needs Planning Considerations for Service and Support Providers</u> (est. 4.5 hours)		
	IS-200.HC <u>Applying ICS to Healthcare Organizations</u> (est. 3 hours)		
	IS-700 National Incident Management System (NIMS), An Introduction (est. 3 hours)		
	Note: It is recommended that all staff take these online courses. They are clearly structured, easy to follow, and take only a few hours to complete. Familiarity with terminology and the government's expectations of health care facilities during an emergency will help prepare the facility for success.		
Practice	Are the staff responsibilities and ICS structures practiced during drills?		
Display	Are roles and responsibilities for disasters clearly displayed at every nursing station, the front desk, kitchen, and other critical access points for easy reference during an emergency? (hint: Display using an ICS chart!)		
	Total		

### **96-Hour Emergency Kits**

Supplies, including food and water, medicines, medical supplies, and other critical resources such as clothing and bedding, are likely to be in short supply following a disaster. Preparing a 96-Hour Emergency Kit for the facility delays the potential impact of these shortages on the facility. This checklist covers the most critical components of the kit, but is not intended to be inclusive. A more comprehensive list is available under the "Emergency Preparedness Resources" link located on the State health department's website located at www.healthfacilities.info.

Please check **YES** or **NO** for the following questions about emergency kits:

Food, Water and Medicine Stockpiles	Is the facility capable of storing four days worth of for and water? 42 CFR 483.70(h)  Are there methods for preparing this food for resider and staff?  Are there extra doses of critical medication available are there extra stockpiles of basic medical supplies as gloves, syringes, bandages, etc.?  Are there sufficient extra clean linens and blankets for any supplier state.	ents e?	YES	NO
Medicine Stockpiles	and water? 42 CFR 483.70(h)  Are there methods for preparing this food for reside and staff?  Are there extra doses of critical medication available are there extra stockpiles of basic medical supplies as gloves, syringes, bandages, etc.?  Are there sufficient extra clean linens and blankets for the sufficient extra clean linear extra clean	ents e?		
·	and staff?  Are there extra doses of critical medication available.  Are there extra stockpiles of basic medical supplies sas gloves, syringes, bandages, etc.?  Are there sufficient extra clean linens and blankets f	e?		
	Are there extra stockpiles of basic medical supplies sas gloves, syringes, bandages, etc.?  Are there sufficient extra clean linens and blankets f			
	as gloves, syringes, bandages, etc.?  Are there sufficient extra clean linens and blankets f	such		
Extra Linens and Clothing	residents?	or		
	Are there alternative methods for heating or cooling residents such as extra, weather appropriate clothin			
	Are there extra clean clothes for the residents?			
Emergency	Is emergency power available? 42 CFR 483.70(b)			
Power and Lighting	If so, is the emergency power effective for minimum 1½ hours? NFPA 99, 3.4.2.2, 3.4.2.1.4	n of		
	Are flashlights readily available, with extra batteries	?		
Communications	Is there a battery-backup operated weather radio, the staff knows how to use?	hat		
	Are there alternative methods of communication wi the facility?	thin		
	Are there alternative methods of communication out the facility?	ıtside		
Safety	Are there shovels, de-ice, or salt accessible for sidew walkways, and doorways?	valks,		
	Is there tape and boards or cardboard for broken gla	ass?		
	Is the staff aware of safe handling procedures for briglass?	oken		
	Can the facility's openings (doors and windows) be isolated from the outdoors?			
	Тс	otal		

### **Exercising the Plan**

Annexes and Hazard-Specific Appendices (the specific plans or procedures on what to do during a disaster) must be exercised regularly. The **Exercise Tracking Log** included in this Hazard Analysis Toolkit might be a helpful addition to the EOP if the facility does not already have a method for tracking training, drills and evaluations.

Using official logs if available, please check **YES** or **NO** for the following questions:

		YES	NO
Does the facility practice tornado drills more than twice a year?			
Does the facility run fire drills at least once per shift each quarte	ι,		
Is there a method for tracking the exercises and drills of the EOP	?		
Is there a method for tracking performance during drills and exe	rcises?		
Are the resources easily accessible to staff?			
	TOTAL		

### **Public Information**

Designating a single point of contact for all information requests for the facility ensures a consistent, accurate message is communicated to families, staff, media, the public and local emergency personnel. Special training is encouraged for identified public information officers (PIOs).

Using current facility policies, please answer **YES** or **NO** for the following questions:

		YES	NO
Is there a designated PIO to coordinate information?			
Are there pre-scripted messages to facilitate accurate, timely inform	nation?		
Is the PIO aware of communication roles with local emergency person	onnel?		
Are other employees aware of the appropriate information procedures?			
	TOTAL		

### **Resource Lists**

During a disaster, facilities need to determine courses of actions, find available assistance, and gather information about the disaster or hazard. These resources include local news websites, the State health department, or radio and television communications. Collecting a resource list in a single location increases their usefulness during a hazard. The contents of resources lists are unique to the needs of the facility.

Please check **YES** or **NO** for the following questions about resource lists:

		YES	NO
Does the facility have a resource list that is easily located?			
Are the resources multi-media in nature?			
Does the list include a call-down sheet with contact information for local emergency managers, first responders, fire, police, and medical support?			
	TOTAL		

### **SECTION THREE: RESPONSE**

This is where much of the planning identified in the "Preparedness" state is actively applied and utilized. Appropriate response measures may vary slightly based on the scope of the disaster, but the basic response framework is the same. For health facilities, the three options are generally to shelter-in-place (SHIP), evacuate (EVAC) or close the facility. In each case, networking within the community and establishing a relationship with the local emergency management departments is critical. This section discusses those partnerships, as well as two of the basic facility response plans. It might be useful to gather any existing aid agreements, supplier contracts, evacuation and sheltering plans, or other disaster resources for the facility before beginning this section.

### Mutual Aid Agreements (MAAs)

Planning for additional assistance before a disaster occurs helps ensure the aid is available when needed. Consider making aid agreements with similar facilities for additional staffing, supplies, or temporarily housing residents. Also consider making agreements both with nearby facilities and with facilities that are ten to fifteen miles away. In urban areas, this distance may need to be further, in order to prevent aid partners from being affected by the same disasters. Alternate forms include the Memorandum of Understanding (MOU) and Memorandum of Agreement (MOA). These forms have varying degrees of responsibility and accountability, and all aid agreements should be cleared by facility legal advisors where applicable.

Using facility records and aid agreements please check **YES** or **NO** for the following questions:

	YES	NO
Does the facility have written MOUs, MOAs or MAAs in place with other <b>local</b> facilities?		
Are there MOUs, MOAs, or MAAs in place with other facilities that are further away?	)	
Are these documents reviewed and re-confirmed on a yearly basis?		
Do the documents include all relevant contact information and activation procedures	5?	
Are aid partners included in drills and exercises?		
Does the facility regularly assess the capability to respond to requests from partners?	?	
Where applicable, are these documents reviewed and approved by legal advisors?		
Are there MAAs for a variety of potential resources, including:		
Evacuation Support		
Extra Staff		
Housekeeping/Maintenance for the building		
Sheltering support		
Supplies (medical, food, bedding, clothing, etc.)		
Transferring Patients		
Transportation		
Total		

### **Shelter in Place Procedures (SHIP)**

Shelter-in-place means defending the safety of residents and staff from inside the facility in the event of an emergency. This requires coordinating critical supplies and resources for availability to the facility, independent of outside assistance. The recommended timeline for SHIP procedures is 96 hours, or four days. It is recommended these plans are posted alongside evacuation plans.

Please check **YES** or **NO** regarding the following SHIP questions:

		YES	NO
Does the facility have a SHIP plan?			
Is the plan practiced regularly (at least twice yearly)?			
Are there adequate supplies on hand to SHIP for at least 96 hours? (see the preparedness section)	е		
Are there procedures to re-evaluate the SHIP decision as the disaster or exprogresses?	vent		
Is there adequate staff to SHIP at any given time, or plans to augment curr staffing levels during an emergency?	ent		
Is the facility in a safe enough location to SHIP for most events?			
Is the SHIP plan posted and easily accessible to staff?			
	Total		

### **Evacuation Procedures (EVAC)**

Though most health facilities prefer not to evacuate, sometimes the nature of the disaster leaves a facility with no alternative. Examples include, but are not limited to, fires, flooding (particularly for single-story facilities), explosions and other causes of significant structural damage. Evacuation plans are required to be posted at the telephone operator's position or security in the facility and at each nurse's station.

Please check **YES** or **NO** regarding the following EVAC questions:

		YES	NO
Does the facility have an EVAC plan?			
Is the plan posted in accordance with State and Federal regulations? LSC 1 19.7.1 (existing facilities), LSC 101 18.7.1 (new facilities) and 6 CCR 1011-1 Chapter V, 13.			
Is the EVAC plan physically exercised at least once yearly?			
Is the EVAC plan drilled quarterly?			
Does the plan include a decision tree for determining when an evacuation appropriate?	is		
Does the plan include conditions for safe re-entry to the facility?			
	Total		

### SECTION FOUR: RECOVERY

"Recovery" facilitates the transition back into normal operations while integrating the fiscal, physical and emotional readjustments for the facility and community. Recovery is a broad concept that bridges two different phases of emergency planning: the EOP and the continuity of operations (COOP) planning. The ideas discussed in this section may be included in the emergency plan at the discretion of the facility, but should not replace the development of additional COOP planning. Before beginning, gather any existing recovery information including official policies for the facility, call down lists, mutual aid agreements, patient transfer procedures, authority trees, and other relevant information.

### **Continuity of Operations (COOP) Planning**

Even the worst disasters eventually end, and planning for Continuing Operations (COOP) is a critical component for recovery. The COOP is a separate document from the EOP, but some measure of continuity planning is part of a well-developed action plan for disaster response.

Please check **YES** or **NO** regarding the following COOP questions:

		YES	NO
Has the facility identified the resources required to re-open or return the to normal procedures after a disaster?	facility		
Are these resources available?			
Is there a timeline implementing the COOP plan after a disaster?			
Does the timeline indicate how long the COOP plan is intended to operate	≘?		
Are there alternate locations for residents?			
Are there check-in procedures for evacuated or temporarily transferred patients?			
	Total		

### **Recovery Mutual Aid Agreements (MAAs)**

Mutual Aid Agreements are as critical to the successful recovery of a facility as they are in preparing for and responding to disasters. Recovery aid agreements are generally classified differently because of scope, intent, scale, and the limited nature of resources following a disaster. Generally, these documents are stored in the COOP plan. The guidelines for recovery agreements are the same: facilities should consider a wide range of potential sources, offer reciprocal agreements, make agreements with both local and outlying facilities and resource centers, and put the agreements in writing.

Please check **YES** or **NO** regarding the following recovery aid agreement questions:

		YES	NO
Does the facility have recovery aid agreements in place?			
If so, do these agreements meet the same standards outlined under Re	sponse?		
Are these agreements reviewed and reaffirmed on an annual basis?			
Are there contingency plans if the facility is unable to fulfill aid agreement other facilities?	ents with		
	Total		

### **SECTION FIVE: READINESS RATING SCORECARD**

The Scorecard provides a quick, single-source overview of the **Readiness Rating Worksheet**. Use this scorecard when filling out the **Risk Assessment Planning Matrix** in Section Three of the Hazard Analysis Packet. It is also a handy single-glance reference for identifying potential exercise or drill areas, and for tracking improvement and progress within the facility's emergency planning process.

### To complete the **Readiness Rating Scorecard:**

- 1. Tally up the total number of **YES** and **NO** responses and record in each section where indicated in the chart below.
- 2. Calculate the percent of questions with a **YES** answer by dividing the total of **YES** answers by the **TOTAL** (YES ÷ TOTAL) answers in each subtotal category, and for the entire sheet.
- Use the key to determine what Readiness Rating corresponds to the percentage and record in the RATING column. This is the number that will transfer onto the Risk Assessment Planning Matrix.

		YES	NO	Total	% YES	Rating	
Section One: Prevention		I		П			Key
Safety Inspections				6			After calculating
Emergency Operations Pla	n			19			the percent of
	Subtotal:			25			answers that were YES, locate
Section Two: Preparedness				I		1	what range the
ICS/Staff Responsibilities				9			percentage for
96-Hour Emergency Kit				17			each section and subsection in
Exercising the Plan				5			the chart below,
Public Information				4			and record the
Resource Lists				3			corresponding  Readiness
	Subtotal:			38			Rating in the
Section Three: Response	1	I		1			Rating column
Mutual Aid Agreements				14			to the left.
Shelter in Place Procedure	S			7			
Evacuation Procedures				6			85-100% = 1
	Subtotal:			27			Very Ready
Section Four: Recovery		I	1	I		1	70-85% = 2
Continuity of Operations				6			Needs Work
Recovery Mutual Aid Agre	ements			4			≤ 70% = 3
	Subtotal:			10			Not Ready
	Total			100			

# SECTION TWO: THE HAZARD ANALYSIS WORKSHEET

# HAZARD ANALYSIS WORKSHEET INSTRUCTIONS

### Step One: Complete the Hazard Analysis Worksheet:

- 1. Read the "Hazards" column and add any additional hazards specific to the facility under the "Other" heading.
- 2. Read across the Costs and Benefit columns.
- 3. Consider each listed **Cost** as it *specifically relates to each hazard*, and assign it a rating of **1(low)**, **2(medium)** or **3(high)**.
- 4. Rate the probability of receiving assistance (a **Benefit**) as it *specifically relates to each hazard* as a **1(low)**, **2(medium)** or **3(high)**.

**Note**: If you are unsure of the rating, <u>err on the side of caution</u>. It is better to overrate a hazard.

### **Step Two**: Calculate the **Total Hazard Score (THS)**:

- 1. Each specific hazard must have its own **THS** computed.
- 2. Add the Costs together.
- 3. Subtract the Benefits.
- 4. Divide by 5.
- 5. Round up at .5 to find whole numbers.
- Fill in the Total Hazard Score column on the Worksheet for each hazard.

**Note**: if you fill this form electronically, the computer will calculate the rating for you.

### **Step Three**: Convert the **THS** into the **Risk Level**:

- 1. The same rating system applies to the Risk Level that applies to every other rating in the Hazard Analysis Packet.
- 2. Each specific hazard should have its own **Risk Level** assigned based on its individual **THS.**
- 3. Use the following key to determine the **Risk Level** for each hazard by finding the correct **THS** in the left-hand column, then matching it to the corresponding **Risk Level** in the right-hand column.
- 4. Fill in this information in the Risk Level column on the Worksheet for each hazard.

Computing Risk Level based on Total Hazard Score

Total	Risk
Hazard	Level
Score	
1	Low
2	Medium
3	High

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# HAZARD ANALYSIS TOOLKIT – HAZARD ANALYSIS WORKSHEET

Facility N	ame:	[Fa	cility Name	e]		•	Date:		[Date	]		
Complete	ed By:	[Person w	ho filled o	ut form	ո]	-						
						Co	sts			Benefit		
(	base	g Risk Level ed on ard Score			Se	Esti	Estim	Estimate	Estim	Amou	Tot	
	Total Hazard Score	Risk Level		Risk of Occurance	Severity of Occurance	Estimated Impact on Staff	Estimated Impact on Supplies	Estimated Impact on the Community	Estimated Replacement Costs	Amount of Outside Assistance	Total Hazard Score:	Risk Level:
	1	Low		cura	Сси	act	ct o	n th	cen	de 1	rd	eve
	3	Medium High		ınce	ranc	on S	n Suj	e Co	ent	A <i>ssis</i>	Sco	el:
L		111811			Ö	taff	oplie	mm	Cost	tanc	re:	
Hazard	s:						Š	unity	\$.	е		
Health D	riven Ha	zards:										
Infectio	ous Disea	ise										
Chem/	Bio/Radi	0										
Epiden	nics/Pand	demics										
Non Hea	ılth Drive	n Hazards:										
Bomb <sup>-</sup>	Threat											
	unicatior	ns Down										
Explosi												
Facility												
	hortage											
	wn Scen	ario										
	Casualty nortage											
		Vital Servic	es									
Other:												

# RISK ASSESSMENT PLANNING MATRIX INSTRUCTIONS

- Complete the Hazard Analysis Worksheet (section 2) and the Readiness Rating Worksheet and Scorecard (section 1) before beginning the Risk Assessment Planning Matrix.
- 2. Locate the All-Hazards region the facility is located in from the list on the left-hand side of the chart, and highlight the corresponding row. There is a regional map at the end of the packet to help facilities locate the correct region.
- 3. Fill in the Risk Level numbers for each of the Facility-Specific Hazards using the **Hazard Analysis Worksheet**.
- Fill in the numbers for the Prevention, Preparedness, Response and Recovery
  Capabilities using the completed Readiness Rating Scorecard, located in the
  Readiness Rating Worksheet.
- 5. Determine which annexes are critical for your facility:
  - Any rating of High Risk (level 3) is critical and must be included in the emergency operations plan.
  - Any rating of Medium Risk (level 2) is likely and should be included in the emergency operations plan.
  - Any rating of **Low Risk** (level **1**) may be included at the discretion of the facility manager. If in doubt, plan for the hazard!
- 6. The State of Colorado and Federal Regulations already identified the first three priorities for emergency planning. These have been filled into the chart already.
- 7. Identify the five remaining <u>MOST CRITICAL</u> hazards for your facility and fill them in the **Hazard Priority Box** below. (This box is referenced several more times.)

Priority	Priority	Priority	Priority	Priority	Priority Six	Priority	Priority
One	Two	Three	Four	Five		Seven	Eight
Facility	Winter	Wildfire	[Critical	[Critical	[Critical	[Critical	[Critical
Fire	Storm		Hazard]	Hazard]	Hazard]	Hazard]	Hazard]

**Note**: These eight objectives will be consistent between forms and analysis. Facilities may include more hazards in the planning and exercising process, but these eight must **always** be present.

- 8. Construct a Hazard Annex for each of these priorities and be sure they are included in the final draft of the EOP. There will be additional tools available at <a href="https://www.healthfacilities.info">www.healthfacilities.info</a> to assist in this process.
- 9. Determine what **Readiness Ratings** need improvement for your facility and form a plan to improve on them. There will be additional tools available at www.healthfacilities.info to assist in this process.

# HAZARD ANALYSIS TOOLKIT – RISK ASSESSMENT PLANNING MATRIX

	ı	Haza	ards	Ide	ntif	ied i	in tl	ne C	olo	rado	o St	ate	EOF	) 	He	ealth	Fac	ility	 ecific	 	 	Pr	even	ition				Rating				Re	covery
1 = Low Risk 2 = Medium Risk 3 = High risk U = Unknown Risk F = Federal Priority S = State Priority	Avalanche	Dam Failure	Drought	Earthquake	Flood (S)	Hazardous Materials	Landslide	Subsidence	Terrorism	Tornado (F)	Transportation	Utility Disruption (S)	Wildfire (S)	Winter Storm (F)		<b>—</b> •	<b>Ω</b>	Bomb Threat	Facility Fire (FS)	Lockdown Procedures	Termination of Vital Services (S)	1	<u>۔</u> م		ICS/Staff Responsibilities	- <u>-</u> - ;	Exercising Hazard Annexes	Public Information	Mutu	. <u> </u>	Sh	COOP Planning	Mut
No. Central	1	3	1	2	3	3	3	1	3	3	3	3	3	3															T				
Northeast	1	3	2	1	3	2	U	2	3	3	2	2	3	U																			
Northwest	3	3	3	1	2	3	3	2	3	2	3	3	2	2																			
San Luis	2	2	3	1	2	1	1	1	3	2	1	2	2	2																			
South Central	2	2	2	2	2	3	2	3	3	3	3	3	3	2																			
South	1	1	3	1	2	2	1	2	3	2	2	3	2	3																			
Southeast	2	2	3	1	2	1	1	2	3	1	1	2	3	2																			
Southwest	2	2	3	1	2	1	1	2	3	1	1	2	3	2																			
West	3	2	2	1	2	2	3	3	3	2	2	2	3	2																			

# SECTION FOUR: THE QUARTERLY EXERCISE SCHEDULE

# QUARTERLY EXERCISE SCHEDULE INSTRUCTIONS:

### Step One: Establish the Hazard Priorities for this facility:

- 1. Locate the All-Hazards Region the facility is located in from the list on the left-hand side of the chart, and highlight the corresponding row.
- Copy the Hazard Priorities from the Risk Assessment Planning Matrix into the Hazard Priorities box on the Quarterly Exercise Schedule and the Exercise Tracking Log. Locate each of the Hazard Priorities from the list across the top of the chart and highlight them. Facility Fires, Wildfires, and Winter Storms have already been completed.

### **Step Two**: Complete **Quarterly Exercise Schedule** form:

1. Each of the **Hazard Priorities** must be exercised at least <u>once a year</u>. Divide the year up into quarters and assign a quarter to exercise each priority. Use the key on the chart to fill in the assignments.

**Note:** Fire Drills fall under separate rules, and have already been filled in for facilities.

2. Group hazards together by potential secondary impact. This increases the effectiveness and efficiency of the exercise, and allows the facility to exercise more hazards.

### Examples include:

- Drill for power loss during a flood
- Staff shortage during a blizzard
- 3. <u>Fire Drills</u> must be conducted at least *ONCE per SHIFT per QUARTER* to meet Federal Life Safety guidelines [*LSC 18.7.1.2* (existing) and *LSC 19.7.1.2* (new)]. Check with local fire departments for additional regulations. Because of this, <u>Facility Fires</u> will always be the first hazard priority!

### **Step Three**: Fill in any extra **High Risk** hazards:

- Facilities may choose to exercise additional high-risk hazards. Fill in any additional exercise priorities for the facilities, using the guidelines above. When making this determination, remember:
  - All High Risk hazards (rating of 3) should be exercised at least <u>once a year</u> and reviewed with staff annually.
  - All Medium Risk hazards (rating of 2) should be exercised at least every other year and reviewed with staff annually.
  - All **Low Risk** hazards (rating of **1**) should be reviewed annually, and exercised at the discretion of the facility manager. When in doubt, exercise the plan.
- 2. Critical Hazards identified in the State Emergency Operations Plan have been lightly shaded in for easy reference.

### **Step Four**: Practice and Record Progress:

- 1. Partner with other facilities, local emergency planners, or the region and State for additional resources and exercise opportunities.
- 2. Use the **Exercise Tracking Log** with this sheet to keep track of what has been exercised and what has not.
  - The **Exercise Tracking Log** should be stored in the appropriate section of the facility Emergency Operations Plan (EOP).
  - The **Hazard Priorities** Box is also on this sheet; don't forget to fill it in!

			На	zard	s Ide	ntifi	ed ir	n the	Col	orad	o St	ate E	ОР		<b></b> -			, <b></b> .				acili			ic H	azar	ds			. — .		
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	Avalanche	Dam Failure	Drought	Earthquake	Flood	Hazardous Materials	Landslide	Subsidence	Terrorism	Tornado	Transportation	<b>Utility Disruption</b>	Wildfire	Winter Storm	Infectious Disease	Chem/Bio/Radio (CBR)	Epidemics/Pandemics	Bomb Threat	Communications Down	Explosion	Facility Fire	Food Shortage	Lockdown Procedures	Mass Casualty	Staff Shortage	<b>Termination of Vital Services</b>						
Regions:																										ces						
North Central													1	3							Q											
Northeast													3	1							Q											
Northwest													1	3							Q											
San Luis													3	1							Q											
South Central								-1-1-		-1-1-			1	3							Q											
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Southeast													1	3							Q											
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# HAZARD ANALYSIS TOOLKIT – QUARTERLY EXERCISE SCHEDULE

						[Facil	ity Name] Exc	ercise Trackin	g Log				
			Quarter One			Quarter Two			Quarter Three			Quarter Four	
Year	Shift	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
	Shift 1	Be sure to log: Date, Hazard and Supervisor Signature											
2009	Shift 2												
	Shift 3												
	Shift 1												
2010	Shift 2												
	Shift 3												

Hazard Priority Box: Fill these boxes in using the original box in Section 2 of the Hazard Analysis Toolkit (www.healthfacilities.info)

Priority One	Priority Two	Priority Three	Priority Four	Priority Five	Priority Six	Priority Seven	Priority Eight
Facility Fire	Winter Storm	Wildfire	[Critical Hazard]				



# HAZARD ANALYSIS TOOLKIT – EXERCISE TRACKING LOG

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# HAZARD DEFINITIONS

**Avalanche**. The winter snow pack presents the danger of avalanche, particularly in the backcountry mountainous areas. They present a significant threat around many of the State's popular ski resort areas. The increasingly heavy usage of the backcountry during the winter months has heightened this ever present winter danger.<sup>1</sup>

*Blizzard*. The propensity and likelihood of severe winter storms extends across the entire territory of the State. High winds, white out conditions, and massive snow accumulation are all components of severe winter storms and blizzards. Blizzards may impact power supplies, hinder transportation and the delivery of goods and supplies, or isolate communities.

**Bomb Threat**. Bomb threats are the attempt of an individual or organization to achieve a desired end-goal, which may or may not be stated, by threatening a target with the use of explosives. Bomb threats may be written, called in, or presented in person and may or may not actually involve a bomb. Though often bomb threats impact individual targets, thereby increasing the likelihood of assistance from the community, sometimes the threat may extend to a wider audience.

*CBRNE*. Stands for Chemical Biological Radiological Nuclear Explosive threats. These are generally identified as the five types of terrorist-based threats. However, each of these categories also has the potential to occur naturally or accidentally, and therefore should be included in mitigation, preparedness, response and recovery planning regardless of a community's terrorist risk. Of particular note, 'explosives' in this section refers specifically to terrorist use. Therefore, a slightly different definition of 'explosion' is also included later in the hazard list.

*Chemical*. Colorado houses one of eight remaining U.S. Department of Army stockpiles of chemical weapons at the Pueblo Depot Activity (PUDA) in Pueblo, Colorado. Facilities in this area are subject to an increased risk from accidental exposure to nerve and blister agents stored at the arms depot, should the stockpiles become compromised in some way (such as an earthquake, fire, terrorist attack, or other disaster). Facilities located in this area (within a 30 mile radius of the depot) should partner with local emergency managers to develop appropriate sheltering or evacuation responses. Facilities located outside of this community are still at risk for accidental exposure to other chemical agents, which are generally addressed under the Hazardous Materials sections because they relate to more conventional (household) chemical exposures.

*Biological*. Contamination from sources of biological threats including anthrax, hantavirus, plague, influenza, ricin, and smallpox. Biological agents are divided into three categories (viral, bacterial, and toxins) which occur both naturally or in mancreated situations for weaponization. Exposure to biological threats includes acts of terrorism, food and water contamination, animal sources, and person to person contact.

<sup>&</sup>lt;sup>1</sup> Colorado State EOP, p 14.

Radiological. Radiological sources include, but are not limited to, medical technologies and supplies, materials located at educational facilities, military resources, the manufacturing of products in certain factories, and everyday household objects such as smoke detectors, cell phones, computer screens and certain food processing techniques. Individuals are exposed to radiation every day. The danger comes from exposure to high doses, particularly in a very short amount of time or to large portions of the body. These potential exposures may include terrorist acts or other explosions that propel radioactive material into the air and onto the scene of a disaster.

*Nuclear*. Though similar to radiological threats, nuclear hazards specifically involve the elements of either plutonium or uranium. These events are often conceptualized as the catastrophic release of radioactive materials, generally due to explosion, either accidentally or intentionally. These thoughts often evoke impressions of a nuclear bomb, regardless of the actual source of nuclear hazard potential. These sources include research facilities, nuclear power plants, weapons assembly or storage plants, nuclear material storage facilities, and acts of terrorism.

*Explosive*. The weapon of choice for terrorism, explosive devices are relatively simple constructions of devices intended to explode and cause death, property damage and fear. Explosives are relatively inexpensive to assemble and potential materials are widely and easily available. Explosives may come in many sizes, may be detonated remotely or by a suicide bomber, and may be used to disperse other additional threats such as shrapnel or radiological agents.

*Dam Failure*. Dam failure is a technological threat facing many communities. In the last 100 years at least 130 of the more than 2,000 dams in the State have failed. The most recent major incident was the 1982 Lawn Lake disaster in Estes Park which caused more than \$30 million in damages and the loss of three lives. There are 303 Class I (High Hazard) and 325 Class II (Moderate Hazard) dams located throughout the State, with the majority located along the Front Range and in the Grand Mesa areas. The failure of any of these dams has the potential of causing extensive property damage and possibly the loss of life. Many of these dams were constructed in the early 1900's making age a concern.<sup>2</sup>

**Drought**. Even in high moisture years, Colorado rainfall does not provide a consistent, dependable water supply throughout the year. Severe drought results in devastating economic consequences for agriculture, forestry, wildlife management, the environment and tourism. Drought recorded history includes severe drought in 1894, 1930-1937, and 1976-1977. The drought of 2002-2005 caused loss of crops and livestock throughout much of the State and reduced revenues from lowered tourist visits. Drought is a concern for facilities because of potential water rationing, and because often drought occurs in concurrence with, or causes, other disasters such as extreme heat (which may result in the loss of power) and increased fire danger.

<sup>&</sup>lt;sup>3</sup> Colorado State EOP, p 14.



<sup>&</sup>lt;sup>2</sup> Colorado State EOP, p 15.

Earthquake. Colorado is rated in the United States Geologic Survey National Earthquake Hazard Maps as having low to moderate earthquake risk. However, several significant earthquakes have occurred within the State, including a magnitude 6.6 near Estes Park in 1882. Also, 90 potentially active faults have been identified to date, with potential, maximum credible earthquakes as high as M 7.5. HazardsUS (HAZUSMR) deterministic analyses of earthquakes on a number of these faults yield potential economic losses in the billions of dollars. Insufficient human and monetary resources have been allocated to an adequate study of the actual earthquake hazard in Colorado. Therefore, the Colorado Geological Survey recommends that site-specific earthquake studies be conducted for any proposed critical facility in the State.<sup>4</sup>

*Epidemic*. Distinct from both an outbreak and a pandemic, an epidemic consists of the inbetween levels of infection and transmission rates. Epidemics occur when a disease with a large capacity to affect the human population breaks out in a localized area that may be as large as a city, may affect cities independent of region, or may be sporadic in appearance but similar in timeframe on a world basis.

**Explosion**. Explosions may be caused by natural events or deliberately by human triggers. Explosions are aimed at property damage, loss of life, disruption of vital services, or to spread contaminants in a given area. Explosions may serve as primary or secondary disasters, and may target primary victims or secondary first responders.

**Facility Fire**. The greatest hazard facing individual facilities is that of a facility fire. Fires may occur because of a variety of natural or human-driven causes. Many inspections and current emergency planning for LTCFs revolves around the protection of the facility, and the residents who live there, from a facility fire.

*Flooding*. Flooding (flash and riverine) is the single greatest potential hazard to property in Colorado. Colorado averages 20+ floods each year. Riverine flooding, caused by rapid snowmelt, usually occurs in May and June. The Western Slope region often experiences riverine flooding in fall months of September and October due to seasonal heavy thunderstorm activities. Flash flooding, usually caused by heavy, stationary thunderstorms, most often occurs in the spring and early summer months (the fall months for southwestern Colorado). Damage potential is greatest along the river basins in the inter-mountain areas and the floodplains along the Front Range. Areas in and below land burned by wildfire have an increased risk of flooding.<sup>5</sup>

**Food/Supply Shortage**. Generally a secondary hazard, food and supply shortages compromise the ability of a facility or community to remain in place. It may be caused by the loss of transportation routes, hampered supply lines impacted by severe weather, or poor preplanning.



<sup>&</sup>lt;sup>4</sup> Colorado State EOP, p 14.

<sup>&</sup>lt;sup>5</sup> Colorado State EOP, p. 13

Hazardous Materials. Hazardous materials used in agriculture, industry, and in the home pose a daily hazard to people and the environment. Coloradoans are vulnerable to the adverse effects of accidental leakage of hazardous materials or a deliberate act using these materials. During the 2002-2005 period, the Department of Public Health and Environment recorded 2,431 reported spills or releases; 993 were at fixed facilities. There are approximately 5,800 fixed facilities where reportable concentrations of hazardous materials are used and/or stored. The oil and gas production industry accounts for 4,200 of those facilities.6 The steady growth in the use of chemicals has resulted in an increased need to transport these materials. Hazardous materials are transported over nearly every roadway throughout the State.<sup>6</sup>

*Infectious Disease Outbreak*. Generally through lack of hygiene, infectious diseases such as flu, meningitis, E. coli, salmonella or staph can break out in a community or facility. Mitigation prevents most of these outbreaks and includes good personal hygiene, hand washing with soap or antibacterial gels, cough etiquette, the use of personal protective equipment (PPE), and good housekeeping. Outbreaks are not the same as epidemics or pandemics, but may incur similar effects within a single facility.

*Landslide*. Landslides may occur by themselves or in conjunction with another natural event such as wildfire, severe winter snowmelt, or heavy rains. In recent years, losses from landslides and debris flows have been extremely high in areas already devastated by wildfires.<sup>7</sup>

*Missing Resident*. A missing resident hazard occurs when a facility is unable to locate a resident under their care, particularly when that resident may pose a danger to themselves or other people. Residents may go missing independent of other hazards, or the situation may be a direct outcome of a hazard. In identifying procedures to locate the resident, primary care of other members of the facility must be maintained.

*Pandemic*. According to the Center for Disease Control (CDC), a pandemic is a global disease outbreak, for which there is little or no immunity in the human population, that begins to cause serious illness and then spreads easily person-to-person worldwide. It is most commonly associated with influenza. Influenza pandemics come in waves lasting between two and three months, with each outbreak of the wave lasting between six and eight weeks in the impacted community. Pandemics are not surprises, and many mitigation factors can help decrease the severity of the pandemic's impact on a given community.

*Severe Weather*. Winter storms in Colorado are occasionally severe enough to overwhelm snow removal efforts, transportation, utilities, livestock management, and business and commercial activities. All of Colorado is vulnerable to storms of disaster proportions. Urban areas, especially those along the Front Range with large populations, are more vulnerable because of larger, more complex, and interdependent services and utilities.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Colorado State EOP, p 14.



<sup>&</sup>lt;sup>6</sup> Colorado State EOP, p 15.

<sup>&</sup>lt;sup>7</sup> Colorado State EOP, p 14.

**Staff Shortage**. Generally the result of another disaster in the community, a staff shortage leaves a facility or community unable to respond to basic daily needs with adequate people. Risks include improper or sub-par care for residents or patients, lack of access to trained medical personnel, overexertion of remaining employees, redistribution of workloads and responsibilities, or employee burnout and attrition.

**Subsidence**. This is the sudden sinking or gradual downward settling of land with little to no horizontal motion. It is caused by the loss of support systems underground. Causes of these support losses are both natural and manmade, and include subsurface mining, pumping oil and groundwater, or other activities that allow the land below the surface to erode. Depending on where they occur, subsidence hazards may pose significant threats to a community by disrupting transportation, destabilizing construction, or compromising gas, electric and water lines.

*Terrorism*. Colorado is at risk for terrorism (domestic and international) and national security incidents. These incidents could take the form of threats and hoaxes, chemical, biological, radiological, nuclear, small-scale conventional weapons or explosives, large improvised explosives, or cyber attacks.<sup>9</sup>

*Tornados*. Tornados are a common threat to those who live along the Front Range and on the Eastern plains of Colorado but tornados have occurred in nearly all counties of the State. The effect of damaging tornados is increasing as more people and businesses are locating in threatened areas. April through October is considered the tornado season, with May and June as the greatest risk months.<sup>10</sup>

*Transportation Emergency*. Particularly in areas with high traffic of vehicles carrying hazardous materials, the potential for a transportation-based emergency may influence planning. This includes railcars, tankers, large trucks, or airways. Road quality, weather conditions, other hazards or terrorism are all potential impacts on the transportation industry.

*Utility Disruption/Loss of Vital Services*. The interruption or loss of electricity, gas or water to a facility or community for a period of time that compromises the integrity of the location, threatens human life safety and health, or interferes with vital services are all concerns of utility disruption. This hazard may occur as a secondary effect of another hazard, or as the result of construction, accident, or terrorism.

*Wildfires*. Wildfire, both natural and human-caused, is a risk to which the entire State is susceptible. The Colorado State Forest Service (CSFS) estimates approximately 1/4th of the State's current population resides within the Red Zone, an area characterized by over six million acres of forestland at high risk for large-scale wildland fire. A century of aggressive fire suppression, combined with cycles of drought and changing land management practices, has left many of Colorado's forests unnaturally dense and ready to burn. In 2002, there were more than 3,072 wildfires that burned more than 915,000 acres. <sup>11</sup>

<sup>&</sup>lt;sup>9</sup> Colorado EOP, p 15.

<sup>&</sup>lt;sup>10</sup> Colorado State EOP, p. 13

<sup>&</sup>lt;sup>11</sup> Colorado State EOP, p. 13

# LIST OF COMMON ACRONYMS

A/V	Audio/Visual	EMS	<b>Emergency Medical Services</b>
AAR	After-Action Report	EMT	Emergency Medical Technician
ARC	American Red Cross	EOC	<b>Emergency Operations Center</b>
ATSDR	Agency for Toxic Substances and Disease Registry	EOP	Emergency Operations Plan/Procedure
C&O	Concept and Objectives	EPA	Environmental Protection
CBRNE	Chemical Biological	EV/A C	Agency
	Radiological Nuclear or Explosive	EVAC	Evacuation
CCR	Code of Colorado Regulations	FAA	Federal Aviation Administration
CDC	Centers for Disease Control	FBI	Federal Bureau of Investigation
	and Prevention	FDA	Food and Drug Association
CDOT	Colorado Department of Transportation	FEMA	Federal Emergency Management Agency
CDPHE	Colorado Department of Public	FOUO	For Official Use Only
	Health and Environment	G&T	Office of Grants and Training
CFR	Code of Federal Regulations	GEEERC	Governor's Expert Emergency
CI/KR	Critical Infrastructure/Key Resources		Epidemic Response Committee
CMS	Centers for Medicare &	HazMat	Hazardous Materials
	Medicaid Services	HCPF	Department of Health Care Policy and Financing
COOP	Continuity of Operations	HFEMSD	Health Facilities and
CSEPP	Chemical Stockpile Emergency Preparedness Program		Emergency Medical Services Division
CST	National Guard Civil Support	HHS	Health and Human Services
DHHS	Team  Department of Health and	HRSA	Health Resources and Services
Dillis	Human Services	116.00	Administration
DHS	Department of Homeland Security	HSGP	Homeland Security Grant Program
DOD	Department of Defense	IC	Incident Command
DOE	Department of Energy	ICS	Incident Command
DOT	Department of Transportation	IP	System/Structure
EM	Emergency Manager	LSC	Improvement Plan
EMA	Emergency Management		Life Safety Code
	Agency	MAA	Mutual Aid Agreement
		MOA	Memorandum of Agreement

MOU	Memorandum of	SAA	State Administrative Agency
	Understanding	SAMHSA	Substance Abuse and Mental
MTL	Master Task List		Health Services Administration
NFPA	National Fire Protection	SHIP	Shelter in Place
	Association	SME	Subject Matter Expert
NGO	Non-Governmental	SNS	Strategic National Stockpile
NUN AC	Organization Management	SOP	Standard Operating Procedure
NIMS	National Incident Management System	TCL	Target Capabilities List
NRC	Nuclear Regulatory	TSA	Transportation Security
	Commission		Administration
NRF	National Response Framework	UC	Unified Command
NRP	National Response Plan	UCS	Unified Command System/Structure
ODP	Office for Domestic	USDA	
	Preparedness	USDA	United States Department of Agriculture
PIO	Public Information Officer	UTL	Universal Task List
POC	Point Of Contact	VIP	Very Important Person
PPE	Personal Protective Equipment		, .
PROFLOW	Procedural Flow	WMD	Weapons of Mass Destruction
REPP	Radiological Emergency Preparedness Program		

## HAZARD ANALYSIS TOOLKIT – SAMPLE INCIDENT COMMAND CHART

### **INCIDENT COMMAND CHART**

**Directions:** Please fill out the names of the individuals who would complete the following roles in the Command Chart in the event of a disaster. **You can change this to suit your needs. This is just a guideline.** 

	Incident Co	ommand		
	Name:	Title: Backup:		
Safety			Public Info	rmation & Liaison
Finance	Logistics	Operat	tions	Planning
Transportation	Staffing	Patient Care	· 	Pharmacy





# All Hazard Emergency Management Regions South Central North Central Northeast Northwest San Luis South Southeast Southwest West Map Printed May 1, 2003. by MapTern Productions for OCI Data Source: Colorado Department of Local Affairs

# Colorado All Hazards Emergency Management Regions

