

Emergency Action Plans



Presented by:
Robert Momany, COSS, COSM, CCI
Executive Director
Safety Council of Northwest Ohio



What are EAPs?

- Emergency Action Plans (EAP's) describe the actions employees should take to ensure their safety in the event of a fire or other emergency.



What are EAPs?

- Well developed EAP's and proper employee training (to ensure employees understand their roles and responsibilities under the plan) will result in fewer and less severe employee injuries, in addition to less damage to the facility during emergencies.
 - An EAP must be in writing, kept in the workplace, and available to all employees for review.
 - An employer with 10 or fewer employees may communicate the plan orally.
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Objectives of an EAP

- Prevent fatalities and injuries.
- Reduce damage to buildings and equipment.
- Protect the environment and the community.
- Resume normal operations as quickly as possible.



EAP Considerations

Any emergency situation that can affect the operation of your facility such as:

- Fire
 - Tornado
 - Severe Weather
 - Flood
 - Security issue (hostages, robberies, etc.)
 - Hazardous Materials incident
 - Building collapse
 - Natural gas leak
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Developing an EAP

Very simple plan will suffice for offices, small retail shops, and small manufacturing locations where there are few or no hazardous materials processes and employees evacuate when alarms sound or they're notified by the public address system.



Developing an EAP

More complex plans are required at facilities that:

- Contain hazardous materials or
- Where employees fight fires, perform rescue and medical tasks, or
- Delay evacuation after alarms sound so they can shut down critical equipment.



Developing an EAP

EAP's must be site specific with respect to:

- Emergency conditions evaluated,
- Evacuation policies and procedures,
- Emergency reporting procedures, mechanisms, and alarm systems.



Suggestions for EAPs

Anticipate the worst and plan for it!



Mandatory Elements



All EAP's must have the following:

- Procedures for reporting a fire or other emergency.
 - Procedures for emergency evacuation, including the type of evacuation and exit route assignments.
 - Procedures to be followed by employees who must remain behind to operate critical plant/facility equipment/operations before they evacuate.
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Mandatory Elements



- Procedures to account for all employees after evacuation.
 - Procedures to be followed by employees performing rescue or medical duties.
 - Name and job title of every employee who may be contacted by employees needing more information about the plan or an explanation of their duties under the plan.
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Why Plan for an Emergency or Crisis?

- Emergencies or crises of all shapes and sizes occur on a daily basis.
- Emergencies or crises have significant impact
 - Physical
 - Emotional
 - Educational



Why Plan for an Emergency or Crisis?

- Effective planning will reduce the level of chaos that occurs in an emergency.
- In event of a significant emergency or crisis, reaction time is essential.



Risk Assessment

- List what types of unforeseen events could potentially occur.
- Categorize what could happen
 - Emergencies outside the facility.
 - Emergencies within the facility.
 - Health emergencies.



RISK

Know Your Local Risks

- Types of hazards likely to occur in your community.
- Their appropriate responses (before, during and after an event).
- The emergency plans available in your community.



2022 Risk Assessment

Franklin County Ohio

1. Tornadoes	11. Civil Disturbances
2. Cyber Threat	12. Severe Summer Weather
3. Infectious Diseases	13. Transportation Accident - Aircraft
4. Flooding	14. Space Weather
5. Lone Wolf Terrorist Incident	15. Extreme Heat
6. Dam/Levee Failure	16. Earthquakes
7. Utility/Energy Interruptions or Failures	17. Invasive Species
8. CBRNE Terrorist Incident	18. Air & Water Pollution/Contamination
9. Severe Winter Weather	19. Drought
10. Hazardous Materials Incident	20. Karst/Sinkhole

Risk Vulnerability Analysis

- Probability
- Human Impact
- Property Impact
- Business Impact
- Internal resources
- External resources



$$\text{Risk} = \text{Threat} * \text{Vulnerability}$$

The equation is visually represented with icons: 'Risk' is accompanied by a question mark icon, 'Threat' is accompanied by a target icon, and 'Vulnerability' is accompanied by a stylized green icon representing a building or structure.

Risk Vulnerability Analysis Terms

Probability	Defined as the likelihood of the event to occur. It has twice the weight of the other factors. In determining the likelihood use statics available to your company and be consistent with your scoring down columns.
Human Impact	Defined as the likelihood of an injury (physical and emotional) to occur during event with the present safeguards and emergency plan.
Property Impact	Defined as the damage to property, materials, and merchandise in relation to a dollar amount if event would occur with present safeguards and emergency plan.
Business Impact	Defined as the loss of production, sales, or status of a company if event would occur with present safeguards and emergency plan.
Internal/External Resources	Defined as resources that enable a company to combat an emergency after the fact that lesson impact.
Total Cost	The number calculated in relation to other possible emergency events that help prioritize your plan, training, and sell components [of the plan] to management.

Risk Vulnerability Chart

Emergency	Probability (+)	Human Impact (+)	Property Impact (+)	Business Impact (+)	Internal/External Resources (-)	Total risk (=)
	1 to 10	1 to 10	1 to 10	1 to 10	1 to 10 (subtract)	0 to 39

10	100% probability of occurring
9	90% probability of occurring
8	80% probability of occurring
7	70% probability of occurring
6	60% probability of occurring
5	50% probability of occurring
4	40% probability of occurring
3	30% probability of occurring
2	20% probability of occurring
1	10% probability of occurring

Risk Vulnerability Chart Example

Emergency	Probability (+)	Human Impact (+)	Property Impact (+)	Business Impact (+)	Internal/External Resources (-)	Total risk (=)
	1 to 10	1 to 10	1 to 10	1 to 10	1 to 10 (subtract)	0 to 39
Fire	4	10	7	5	9	15
Tornado	4	7	9	8	5	23
Flood	8	5	6	4	6	17
Hostage situation	3	7	1	6	4	13

Key Elements of an EAP

- Evacuation procedures, escape routes and floor plans.
- Fire prevention plan.
- Procedures for employees conducting critical plant operations.
- Rescue and medical duties for any employees designated to perform them.
- Reporting methods of a fire or emergency.



Key Elements of an EAP



- Notifying employees and non-employees of an emergency.
 - Methods to account for employees and non-employees.
 - Designating a Public Information Officer.
 - Training.
 - Procedures for updating and maintaining the EAP.
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Evacuation Procedures

- Detailed procedures for each risk identified in assessment.
- Identify conditions under which an evacuation would be necessary.
- Designate a clear chain of command.
- Assembly point.
- Shelter-in-place.



Escape Routes and Floor Plans

- For every section of the facility.
- Designate "primary" and "secondary" escape routes.
- Must be kept current.



Procedures for Employees Conducting Critical Plant Operations

- Specific equipment.
- Utilities.
- Recognize when to abandon the task and evacuate.



Rescue and Medical Duties

- First aid must be available within 3 to 4 minutes of an emergency.
- Worksites more than 3 to 4 minutes from a hospital, clinic, or medical center should have at least one person on-site trained in first aid (available all shifts).



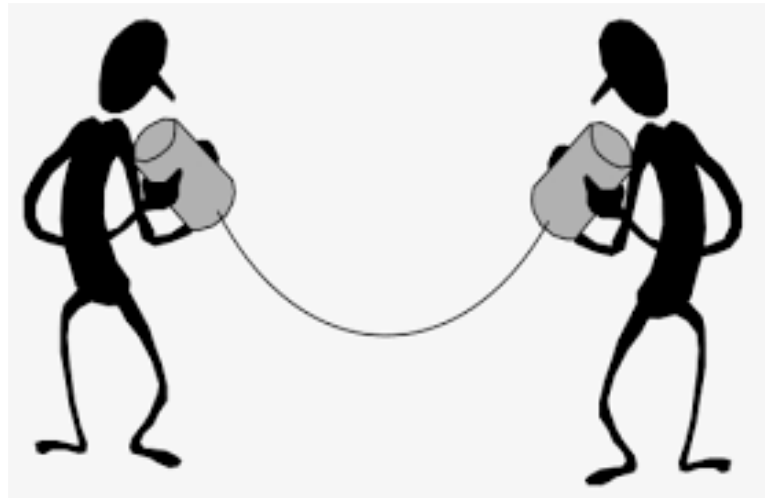
Notifying Employees and Non-Employees of an Emergency

- Non-employees = Guests, vendors, contractors, visitors, and any other person that may be on site.
- Alarms must be distinctive.
- Using tactile devices to alert employees who would not otherwise be able to recognize an audible or visual alarm.
- Providing an updated list of key personnel.



Communications

- Mass messages
- Operational radios
- Battery operated devices
- Cell phones are not reliable
- Color codes



COLOR CODES

Color Code Example

Ohio Emergency Codes	
CODE NAME	EVENT
Code Red	Fire
Code Adam	Infant/Child Abduction
Code Black	Bomb/Bomb Threat
Code Gray	Severe Weather
Code Orange	Hazardous Material Spill/Release
Code Blue	Medical Emergency—Adult
Code Pink	Medical Emergency — Pediatric
Code Yellow	Disaster
Code Violet	Violent Patient/Combative
Code Silver	Person with Weapon/ Hostage Situation
Code Brown	Missing Adult Patient

Methods to Account for Employees and Non-Employees

- Paper roster
- Electronic roster
- Badge scanner
- Cell phone



Designating a Public Information Officer

- Have a single individual identified as the media contact person.
- Instruct all employees to direct any inquiries from the media and the public to the PIO
- This individual should be well trained on how to respond properly to sensitive questioning and should know what information is and is not acceptable to divulge.



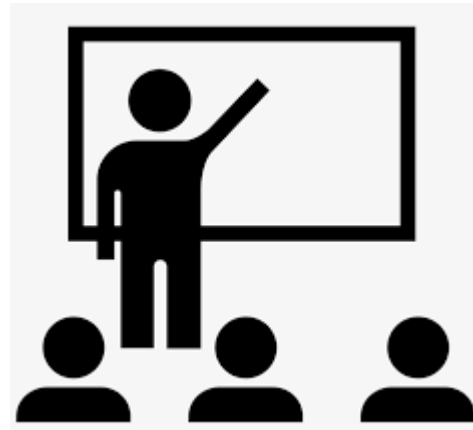
Training

- When and how often?
- Individual roles and responsibilities.
- Threats, hazards, and protective actions.
- Notification, warning, and communication procedures.
- Emergency response procedures.



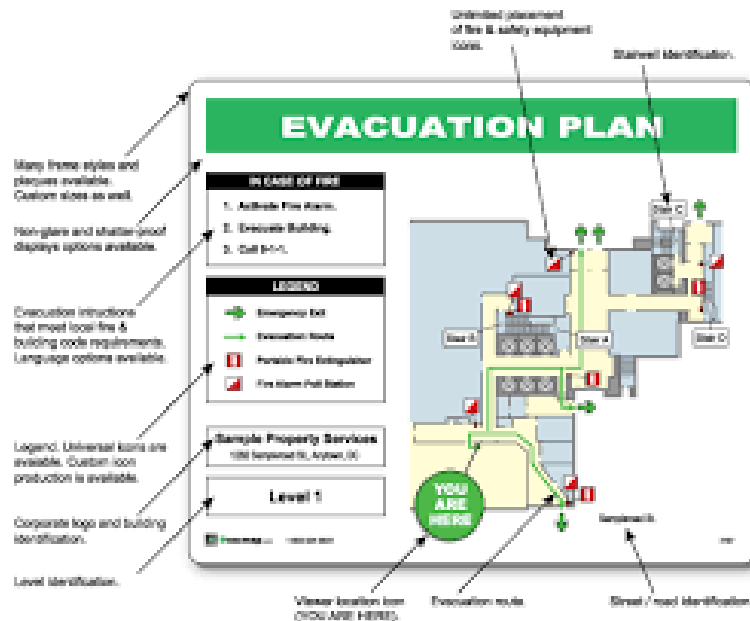
Training

- Evacuation, shelter, and accountability procedures.
- Location and use of common emergency equipment.
- Emergency shutdown procedures.
- Drills.



Procedures for Updating and Maintaining the EAP

- Review at least annually.
- Any changes in the facility.
- Any changes in personnel.



Means of Egress

Any
safety
issues
here?



Yes! Exit
access
obstructed by
miscellaneous
storage.





Good EAPs

- Are practical, functional, and understandable.
 - Are kept updated and available to all employees (including contracted employees).
 - Are put in practice by regular drills.
 - Are shared with local emergency response agencies.
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EAPs - Review

- Must have one for each location.
- Must be communicated to employees.
- Must be reviewed at least annually and updated where appropriate.
- Employees must be trained on proper procedures and they need to understand the plan.

Employees' understanding of and willingness to follow the plan will ensure their safety!



THE END

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