Emergency Planning
What to Consider;
An Industry and First Responder’s Perspective

2011 MSHA SPRING THAW
Presented by:
Ron Carruthers
& Paul Marsh
All characters appearing in this work are fictitious. Any resemblance to real persons, living or dead, is purely coincidental.
Scenario

2nd shift at XYZ mine in Anywhere Town Arizona. It is 6:30pm, and the 3 man crew is just finishing lunch, when the supervisor “John Doe” gets up and says, “I am going to go change that burnt out light over by the crusher before it gets dark.”

The other two miners stay in the lunchroom and finish their lunches.
Scenario

About 5 minutes pass when the other two employees leave the lunchroom and go to the crusher to find the supervisor John Doe.

When they arrive at the crusher, they find John lying unconscious and not breathing next to the ladder. There is no light bulb in the fixture that John was working on.
FAILURE TO PREPARE IS PREPARING TO FAIL
What went WRONG?

• No access to EAP phone list.
• Only the supervisor was trained in EAP.
• Only the supervisor was 1st Aid / CPR cert.
• No access to 1st Aid supplies.
• Employees did not access the scene 1st.
MSHA Requirements

30 CFR § 56.4330
Firefighting, evacuation, and rescue procedures.

FIREFIGHTING PROCEDURES / ALARMS /DRILLS

(a) Mine operators shall establish emergency firefighting, evacuation, and rescue procedures.

These procedures shall be coordinated in advance with available firefighting organizations.
30 CFR § 56.18012
Emergency telephone numbers. Emergency telephone numbers shall be posted at appropriate telephones.

30 CFR § 56.18013
Emergency communications system. A suitable communication system shall be provided at the mine to obtain assistance in the event of an emergency.
MSHA Requirements

30 CFR § 56.18014
Emergency medical assistance and transportation.
Arrangements shall be made in advance for obtaining emergency medical assistance and transportation for injured persons.
What is an EAP?

The EAP (Emergency Action Plan) is in place to ensure employee safety from emergencies during regular working hours and after hours. It provides a written document detailing and organizing the actions and procedures to be followed by employees in case of a workplace emergency.
What is an EAP?

The EAP communicates to employees, policies and procedures to follow in an emergency.

The EAP is intended to prepare all employees for an emergency.

If the EAP is prepared well and practiced, all employees will know where they are expected to be if an emergency occurs.
Components of an EAP?

Emergency Action Plan Team:
1. Who is in charge?
2. Who is responsible to call emergency services?
3. Who will secure the gate or entrance?
4. Who will escort emergency personnel?
5. Who is trained 1st Aid & CPR procedures?
EMERGENCY ACTION PLAN

PLANT: ___________________________ MSHA ID #: ___________________________

EMERGENCY ACTION PLAN TEAM:
Emergency Response Plan (ERP): Who is in charge?
   ERP Supervisor: ___________________________
   Back-up ERP Person: ___________________________

EMERGENCY SERVICE PROVIDERS:
Caller: Who is responsible to call the Fire Department and/or Police
   Caller #1: ___________________________
   Caller #2: ___________________________
   Please be ready to explain who you are, what your emergency is (Fire, Medical Emergency, Collision, etc), where you are located (Plant location), and how to get to the facility (any special directions).

EMERGENCY ACTION PLAN DUTIES:
Guards: Person to Close or Secure Gate or Entrance
   Gate #1: ___________________________
   Gate #2: ___________________________

Escorts: Person to Escort Emergency Personnel to Incident Scene
   Escort #1: ___________________________
   Escort #2: ___________________________

First Aid Providers:
   1st Aid #1: ___________________________
   1st Aid #2: ___________________________
   1st Aid #3: ___________________________
Roles of EAP Team

1. Supervisor – In control of situation
   a. Back up Supervisor
2. Gate Guard – Secure gate or entrance -media
   a. Back up Gate Guard (how many entrances?)
3. Escort – Takes EMS to incident scene
   a. Back up Escort. (Fire and Ambulance separate)
4. First Aid Providers – distance to nearest 1st Aid kit & emergency materials.
5. Critical Plant Shutdown Procedures?
Components of an EAP?

Emergency Phone List
1. Name of facility
2. Address of facility
3. Phone # to contact emergency services.
4. Simple directions of phone list.
5. Company Officials phone list
6. MSHA ID#
XYZ MINING
EMERGENCY PHONE LIST
XYZ Plant – Production  MSHA ID# 12-3456
123 w Mining Road
Anywhere AZ, 98765

In all cases of severe injury or fatality, first contact emergency response (911), and then contact your Foreman/Supervisor below. If the Foreman/Supervisor cannot be reached then immediately contact one of the following managers listed below. If no one answers, leave a message with your name, the plant you work at, and the nature of the injury/incident.

Keep calling names on the list until you reach someone.
When calling emergency response, please make sure someone is waiting at the guard shack to escort emergency personnel to incident scene.
Fire Department / Ambulance / Police/Sheriff - 911

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Foreman</td>
<td>123-456-7890</td>
</tr>
<tr>
<td>Safety Manager</td>
<td>123-456-7891</td>
</tr>
<tr>
<td>Operations Manager</td>
<td>123-456-7892</td>
</tr>
<tr>
<td>Director of Safety</td>
<td>123-456-7893</td>
</tr>
</tbody>
</table>

In case of chemical spills, please contact:
Environmental Manager   123-456-7894

HOSPITAL

CLINIC
Practice

Think about it-
• Practice makes perfect!
• Hands on is best approach
• Include the local EMS when possible
• Train as many employees as possible
• Use training to find “holes” in planning
Immediately Reportable Accidents and Injuries are:

- A death of an individual at a mine;
- An injury to an individual at a mine which has a reasonable potential to cause death;
- An entrapment of an individual for more than thirty minutes or which has a reasonable potential to cause death;
- An unplanned inundation of a mine by a liquid or gas;
- An unplanned ignition or explosion of gas or dust;
- In underground mines, an unplanned fire not extinguished within 10 minutes of discovery; in surface mines and surface areas of underground mines, an unplanned fire not extinguished within 30 minutes of discovery;
- An unplanned ignition or explosion of a blasting agent or an explosive;
- An unplanned roof fall at or above the anchorage zone in active workings where roof bolts are in use; or, an unplanned roof or rib fall in active workings that impairs ventilation or impedes passage;
- A coal or rock outburst that causes withdrawal of miners or which disrupts regular mining activity for more than one hour;
- An unstable condition at an impoundment, refuse pile, or culm bank which requires emergency action in order to prevent failure, or which causes individuals to evacuate an area; or, failure of an impoundment, refuse pile, or culm bank;
- Damage to hoisting equipment in a shaft or slope which endangers an individual or which interferes with use of the equipment for more than thirty minutes; and
- An event at a mine which causes death or bodily injury to an individual not at the mine at the time the event occurs.
Normal ECG

- 12 lead
Abnormal V-Fib

- In trouble
What you see
What does EMS see?