

### Your help is needed

The Arizona State Mine Inspector is authorized to locate abandoned mines and requires the owners to barricade or close inactive mines. If you discover a mine opening that appears dangerous and abandoned, please report it by calling: (602) 542-5971.



**Joe Hart**  
**Arizona State Mine Inspector**



**Arizona State Mine Inspector's Office**

Abandoned Mines Program  
1700 West Washington, Ste. 403  
Phoenix, Arizona 85007-2805

Phone: 602-542-5971

Fax: 602-542-5335

Email: [abandonedmines@asmi.az.gov](mailto:abandonedmines@asmi.az.gov)

## Arizona State Mine Inspector's Office

# Abandoned Mines: Stay Out & Stay Alive!

**Abandoned Mines are not fun!**

**They are serious accidents waiting to happen!**

**They are deadly traps for the unwise!**



## Mine shafts: The bottom is a long way down

Few people would deliberately walk close to the edge of a skyscraper's roof, just as no one should walk close to the edge of a mine shaft. Falling down a shaft is as potentially lethal as falling from a tall building.

Falling in a shaft for even a short distance can cause serious injury or even death. Injuries can result from bouncing between the walls of the shaft and from the rocks and timbers that often cascade down with the victim.



Areas of a mine that were once quite safe become dangerous after years of neglect. Decomposed rock often surrounds the top of a mine shaft and supporting timbers are frequently rotten. The entire area near an opening is often unstable and may cave into the shaft at any time, carrying an unwary trespasser with it.

### Mine tunnels: Inviting but lethal

The dangers associated with mine tunnels, or adits, are not always so obvious as with shafts. Anyone entering an old adit risks injury or death from one or more of the fol-

lowing: hidden shafts, deep water, cave-ins, bad timbers, poisonous gases, unstable explosives, and wild animals.

Mine tunnels frequently have shafts in them that are covered with boards. These timbers may be hidden under dirt, fallen rock, or other debris. The weight of a person on these old boards might cause them to collapse without warning, sending the victim tumbling deep into the shaft.

Pools of water may conceal deep holes in the floor of a mine tunnel. Deep water is also found in many shafts. One false step can lead to a disaster.

### Cave-ins: Sneaky and unforgiving

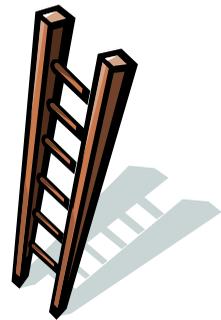
Cave-ins are unpredictable. Often, areas most likely to cave-in are the hardest to detect. Minor disturbances, like the vibrations from footsteps or from speaking, can cause cave-ins. The sudden crush of falling earth produces either serious injury or instant death. Perhaps even more terrifying is being trapped behind a cave-in with little or no chance of rescue; in effect being buried alive. Death comes through starvation, thirst, or gradual suffocation.

**Treacherous timbers: A deceptive danger**



Modern mines use non-wood materials or treated lumber as supports. Older, abandoned mines used raw wood that easily succumbs to decay and dry rot. While timber supports may appear to be in good condition, they might actually be very loose and ready to fall apart at the slightest touch. A mine opening might appear well timbered and solid but actually be supported by wood barely able to hold its own weight. Anyone walking in the tunnel risks the danger of accidentally touching a timber and causing the passageway to collapse.

Ladders in abandoned mines are unsafe.



Those made of wood can have broken and decayed rungs as well as rusted nails. Some can even collapse from dry rot under their own weight. Metal ladders are not any better as their anchors are often

broken or placed in unstable rock. Stepping on the ladder may cause it and the entire shaft to collapse. All ladders in abandoned mines are dangerous!

#### **Bad air: an invisible but deadly peril**

“Bad air” is one of a miner’s greatest fears. While most dangers are obvious, air contain-

ing poisonous gases or insufficient oxygen cannot be detected until too late. Poisonous gases accumulate in low areas and along the floor. Walking into these low spots causes the good air above to stir up the bad air below, producing a potentially lethal mixture.



Another aspect of bad air is found when exploring mine shafts.

While descending into a shaft may be relatively easily, climbing out may prove to be very dangerous. Climbing produces a level of exertion causing a person to breathe deeper than normal. This will increase the level of noxious gases being inhaled which in turn may result in dizziness, unconsciousness, and possibly death. Furthermore, even if the gases prove to be non-lethal, they may cause the victim to fall while climbing.

Standing water absorbs many gases. These gases will remain in the water until it is disturbed. This can happen when someone walks through it. As the gases are released, they rise behind the walker where they remain as an unseen danger when the person retraces his steps.

#### **Explosives: more unpredictable and dangerous with age**

Even experienced miners hesitate to handle old explosives. They realize the ingredients in explosives

will deteriorate with age and can detonate at the slightest touch. Many abandoned mines contain old explosives left behind when the operation closed down. Innocent looking sticks and blasting caps are potential killers.



The best advice around explosives is “Do not touch or go near it.” Call the local sheriff’s office or the Arizona State Mine Inspector’s Office at (602) 542-5971. They will arrange for the safe disposal of the explosives.

#### **Snakes: one of several dangerous critters**



Arizona’s desert dwellers frequently live in mine entrances. They find old mines cool in summer and an excellent source of food. Any hole or ledge near the entrance of the mine can conceal a snake. Javelinas, bobcats, mountain lions, and other predators also make their homes in abandoned mines. Even a small animal can inflict a great deal of injury if it is surprised.

#### **Exploring abandoned mines: an unwise act of criminal trespass**

Although a mine may appear abandoned it does belong to someone and trespassing laws do apply. Anyone rescued from an abandoned mine may face

criminal trespass charges.

Tools, equipment, building materials, and other items on mine sites are not to be taken. Those who remove equipment are subject to prosecution as thieves. Warning signs are posted for everyone’s safety. Vandalizing signs or removing them is a Class 6 felony and is punishable by a fine or imprisonment.

#### **Abandoned mine rescues: a dangerous undertaking**

Mine rescue is a dangerous operation even for professional teams. Nothing is gained by risking yet



another life when attempting to save someone already trapped in a mine. In too many situations, amateur rescuers become victims themselves. Keep calm and note the exact location of the mine before seeking professional help.

If a rescue is necessary, call the County Sheriff. His office will contact the State Mine Inspector and together they will organize a mine rescue operation. Remember, all of the hazards outlined in this pamphlet also threaten trained rescue teams.