



# Explosions (Pipeline, Plant)

**E**xplosive devices can be highly portable, using vehicles and humans as a means of transport. They are easily detonated from remote locations or by suicide bombers. There are steps you can take to prepare for the unexpected. (From [www.ready.gov](http://www.ready.gov).)

## How it Might Impact Your Utility Service

- Pipelines contain flammable, hazardous, and even deadly petroleum gases, liquids, and other chemical products.
- An explosion will likely destroy homes and businesses within the blast areas of the explosion.
- Serious bodily and property damage is likely to occur.
- An explosion will likely cause complete interruption or destruction of facilities that provide service.
- Cell phone service is likely to be unreliable.



## ALERTS

The most telling sign of a natural gas line leak is the familiar rotten egg odor of the natural gas. This odor is added to the natural gas so it can be detected in the event of a leak.

If your utility company is aware of a dangerous leak in your area, the area will likely be evacuated due to explosion risk.

If an explosion occurs in your vicinity, you will likely hear it; there will also be emergency first responders on the scene very quickly.

If an explosion occurs, there will be extensive news coverage almost immediately.

## BEFORE AN EXPLOSION

- Know what natural gas smells like—some utility companies have education programs that will permit you to experience the smell.
- If you detect a strong gas odor, follow these tips:
  - Do not attempt to locate the leak.
  - Do not turn any electrical appliances on or off.
  - Do not smoke or use any open flames.
  - Leave the house and, from a safe distance, call 9-1-1 and the utility company.

- The Pipeline Association for Public Awareness has a Pipeline *Emergency Response Guidelines* publication that include other indications of a leak:
  - An odor like rotten eggs or a burnt match (odorized natural gas only)
  - A loud roaring sound like a jet engine
  - A hissing or whistling noise
  - Fire coming out of or on top of the ground
  - Dirt blowing from a hole in the ground
  - An area of frozen ground in the summer
  - An unusual area of melted snow in the winter
  - An area of dead vegetation
  - Bubbling in pools of water
- When digging outside, if a natural gas line is damaged, call the utility and 9-1-1 immediately. Do not attempt to repair the line.
- The biggest hazard of a gas leak is an explosion. When natural gas builds up in an enclosed area, it becomes extremely volatile. A gas buildup has the potential to be explosive and or could make those in the area very sick.
- Gas leaks in the home can be easily prevented by ensuring that flexible gas lines are inspected regularly and installed properly by licensed professionals.
- Gas leaks outside the home are dangerous as well. Most gas lines coming into the home are buried underground. Before doing any job that requires digging outside, homeowners should contact their local **Utilities Protection Service** Utilities Protection Service by dialing (usually) 8-1-1 at least 48 hours before digging. The utilities will be contacted and asked to mark the lines they own. After the lines have been marked as safe, careful digging can begin.
- Pipeline Safety Trust: ***What To Do In An Emergency***. Have an evacuation plan that is familiar to all family members.

## **DURING AN EXPLOSION**

- Evacuate if possible.
- Get under a sturdy table or desk if things are falling around you. When they stop falling, leave quickly, watching for obviously weakened floors and stairways.
- Do not use elevators.
- Stay low if there is smoke. Do not stop to retrieve personal possessions or make phone calls.
- Check for fire and other hazards.
- After evacuation, do not stand in front of windows, glass doors, or other potentially hazardous areas.
- If you are trapped in debris, use a flashlight, whistle, or tap on pipes to signal your location to rescuers.
- Shout only as a last resort to avoid inhaling dangerous dust.
- Cover your nose and mouth with anything you have on hand.

## **AFTER AN EXPLOSION**

- Be patient.
- Follow the directions of first responders and utility personnel.
- The Red Cross will likely be on site to help those displaced by the explosion.
- There may be significant numbers of casualties or damage to buildings and infrastructure.
- There will be heavy law enforcement involvement at local, state, and federal levels—be sure to comply with all orders and instructions from law enforcement.
- Health and mental health resources in the affected communities may be strained to their limits, maybe even overwhelmed.
- Remain calm. There will be extensive media coverage, strong public fear, and widespread consequences.
- Expect businesses and schools to be closed, with possible restrictions on local travel.
- You and your family or household may have to evacuate an area, avoiding roads blocked for your safety.
- Cleanup may take many months.

## **RESOURCES**

Pipeline Emergency Response Guidelines: <http://bit.ly/2C7J9o3>

Pipeline Safety Trust, What To Do in an Emergency: <http://bit.ly/2AzpD3W>