



Colorado Springs Utilities

*It's how we're all connected*

# Community Safety Education

**JANE ZOOK, COMMUNITY EDUCATION ADMINISTRATOR**

# Colorado Springs Utilities



- **Founded 1924, community-owned, 4 services, 1895 employees**
- **Colorado Springs population: 426, 881**
- **El Paso County: 2130 square miles**
- **Colorado Springs: 200 square miles**
- **Electric service area 475 square miles**
- **Gas service area 527 square miles**
- **Approximately 656,000 customers total for 4 services**
- **221,796 electricity customers**
- **5 military bases 196,635 natural gas customers**

# Public Safety Education

- Educating for almost 40 years
- 2017 APPA Community Service Award
- Almost 350 annual gas and electric safety presentations
- Requests via [www.csu.org](http://www.csu.org), Salesforce
- Interactive: Inquiry activities, multiple learning modalities
- Goals: align to standards, increase knowledge, behavior change
- Component of Gas Public Awareness





**SafetyCircuit:  
Electric Safety  
and You**

3rd - 6th grade



**Grade specific emphasis:**

**3rd grade** – Injury prevention, personal safety knowledge and skills

**4th grade** – Forms & sources of energy, electrical circuits, injury prevention

**5th grade** – Earth systems science, non-renewable energy, injury prevention

**6th grade** – Physical science, forms and sources of energy, injury prevention

## Electric SAFETY EDUCATION

**SafetyCircuit: Electric Safety and You**

3rd - 6th grade students

Our experienced professionals use a live electric demonstration board in your classroom to illustrate how the safe use of electricity can affect all aspects of our daily activities. Presentation inquiry activities, vocabulary and content are designed to align with CDE Academic Standards and are adjusted to each grade level.

The presentation is 50 minutes with a minimum class size of 15 and maximum of 60. Multiple presentation sessions are available. The demonstration requires a 10-foot space near an electrical outlet. Program emphasizes the Comprehensive Health standard to apply personal safety knowledge and skills to prevent unintentional injury.



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To schedule a presentation:

Contact Jane Zook at 668-8386 or email: [jzook@csu.org](mailto:jzook@csu.org)



**Your Nose  
Knows!**

Natural Gas Safety

3rd - 5th grade



**Grade specific emphasis:**

**3rd grade** – States of matter, personal safety knowledge, injury prevention

**4th grade** – Physical science, forms of energy, personal safety and injury prevention

**5th grade** – Earth systems science, non-renewable energy, injury prevention

## Natural Gas SAFETY EDUCATION

**Your Nose Knows! Natural Gas Safety**

3rd - 5th grade students

Our professionals discuss the origins of natural gas from fossils, the natural gas system and how it is used in our homes today. A simulator and flame is used to demonstrate a controlled natural gas explosion. The presentation has an emphasis on the three S's of natural gas safety: sight, smell and sound; as well as actions to take if students detect natural gas in their home or school.

The presentation is 50 minutes with a minimum class size of 15 and a maximum of 60. Multiple presentation sessions are available. The demonstration requires a 10-foot space to set up a table. Program emphasizes the Comprehensive Health standard to apply personal safety knowledge and skills to prevent unintentional injury.



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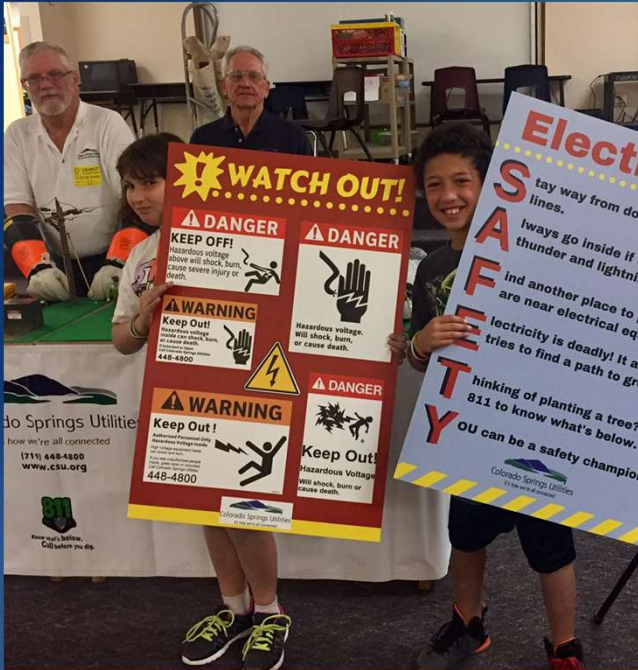
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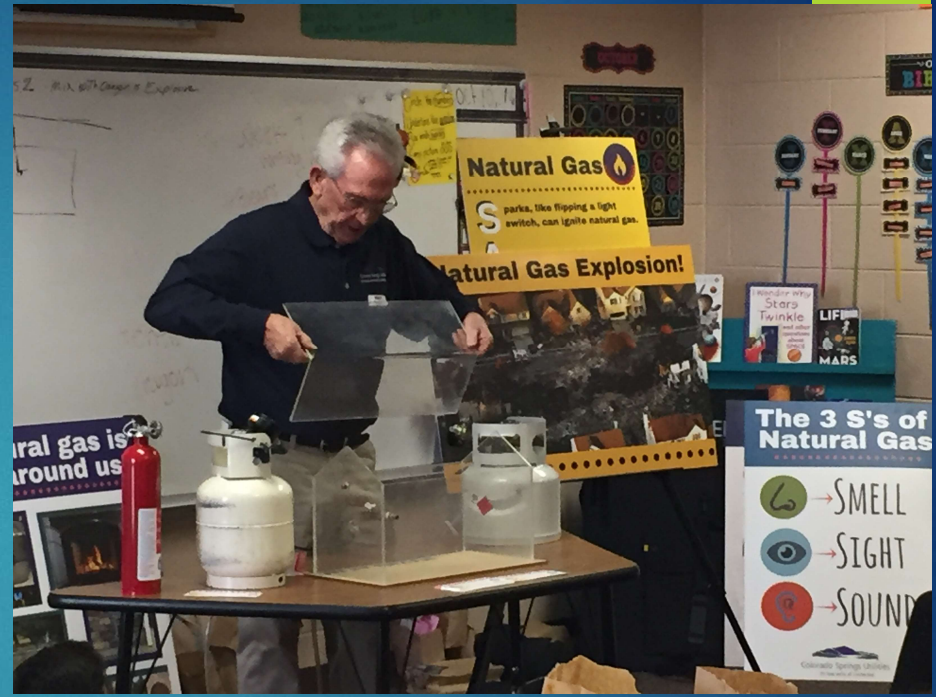
**COLORADO**  
Department of Education

Colorado State Library



# SafetyCircuit: Electric Safety & You








# Your Nose Knows! Electric Safety & You

# Natural Gas Safety

**YOUR NOSE KNOWS:** If you smell gas, exit fast!

Complete these natural gas safety activities, have a grown-up sign, then return to your teacher.

**Know the "three s's"**

 S \_\_\_\_\_ → (rotten eggs)  
 S \_\_\_\_\_ → (brown grass)  
 S \_\_\_\_\_ → (hissing)

Did you know your senses can detect a gas leak? If you suspect a leak, leave the area immediately and call 911, then call us at 448-4800.

**NATURAL GAS IS:**



## States of Matter (drawing)

Matter is the "stuff" of the universe. It is the things that make up all physical things. Everyday life is made up of four states of matter.



**SOLID**



**LIQUID**

**GAS**

**PARENT & GUARDIAN ENGAGEMENT**

Adult Signature: \_\_\_\_\_

## WHERE DOES NATURAL GAS COME FROM?



A FOSSIL FUEL

comes from deep underground rock formations. Fossil fuels are used as energy to cook, heat homes and generate electricity.

**FOSSIL FUELS (fill in the blanks):**

- 1 are \_\_\_\_\_
- 2 come from the \_\_\_\_\_
- 3 formed from \_\_\_\_\_ dead plants and animals

\_\_\_\_\_ mining \_\_\_\_\_ non-renewable \_\_\_\_\_ ground

- \_\_\_\_\_ have a carbon monoxide alarm? \_\_\_\_\_
- What is the phone number for emergencies? \_\_\_\_\_
- What should you do if you smell gas? \_\_\_\_\_
- What phone number should you call before you dig? \_\_\_\_\_



Planting a tree? Building a fence? Installing a mailbox? Call or click 811 before you dig to locate underground lines such as water, wastewater, electric, and natural gas pipes.



Know what's below.  
**Call before you dig.**

Fill in the words:

e \_ \_ \_ c \_ \_ \_ \_ c  
 g \_ \_ \_  
 w \_ \_ \_ \_ r  
 w \_ \_ \_ e w \_ \_ \_ r

**DID YOU KNOW?**

Every 6 minutes an underground utility line is damaged because someone didn't call 811!



# Electric Safety

Play it safe around electricity!

Complete these natural gas safety activities, have a grown-up sign, then return to your teacher.



## INDOOR ELECTRICAL SAFETY

Circle the problem areas in the scene above and fill in the blanks:

- ✓ Never put \_\_\_\_\_, drinks or other liquids on or near electrical equipment.
- ✓ Never remove bread stuck in a \_\_\_\_\_ while it is plugged in.
- ✓ Keep space \_\_\_\_\_ THREE feet away from anything flammable, like curtains.
- ✓ Damaged electrical \_\_\_\_\_ are dangerous.

**Word Bank:** cords heaters toaster water



Know what's below.  
Call before you dig.

Planting a tree? Building a fence? Installing a mailbox?

Call or click 811 before you dig to locate underground lines such as water, wastewater, electric and natural gas pipes.

Fill in the words:

e \_ \_ \_ c \_ \_ \_ \_ c  
 g \_ \_ \_  
 w \_ \_ \_ \_ r \_  
 w \_ \_ \_ e w \_ \_ \_ \_ r

Adult Signature: \_\_\_\_\_

## OUTDOOR ELECTRICAL SAFETY



Circle the dangerous areas in the scene above and fill in the blanks:

- ✓ Lightning is deadly! When thunder roars, go \_\_\_\_\_!
- ✓ Never climb trees near \_\_\_\_\_. Contact with a line is dangerous and deadly.
- ✓ Do not climb on electric \_\_\_\_\_ marked with a warning sign.
- ✓ Stay far away from a \_\_\_\_\_ line or supporting wire near a power line.

**Word Bank:** equipment indoors downed power lines

## TRUE or FALSE

CIRCLE ONE:

- T / F: Electricity travels at the speed of light, more than 186,000 miles per second!
- T / F: It is okay to stand on electric utility boxes.
- T / F: A spark of static electricity can measure up to 3000 volts.
- T / F: Electricity takes the easiest path to the ground.
- T / F: Electricity can be made from wind, water and the sun.
- T / F: Climbing trees near power lines is okay if the tree isn't too tall.
- T / F: Water and electricity are a good mix if the water is warm.
- T / F: It is dangerous to plug too many things into one electric outlet.

ANSWERS: (1) T (1) T (2) F (3) T (4) T (5) T (6) F (7) F (8) T

## Renewable and Non-renewable Energy

Non-renewable energy resources are available in limited supply and take a long time to regenerate. Renewable resources are replaced over short periods of time naturally.

Place an "N" next to the non-renewable resources and an "R" next to the renewable resources.

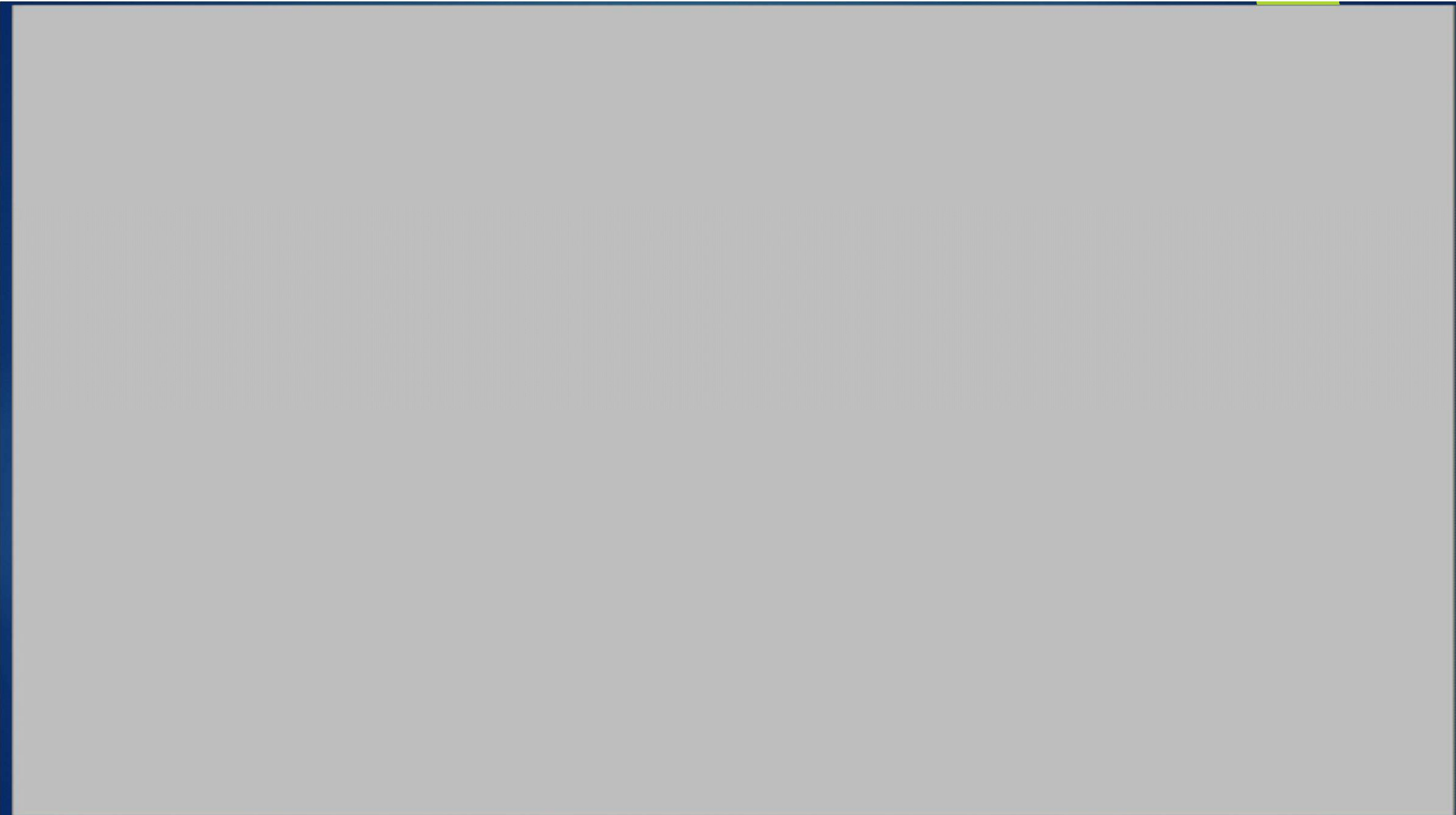






# First Responder Education & Awareness









- ## Community Events
1. Call 811
  2. CO Alarms
  3. Natural Gas
  4. Overhead Lines



**Knowledge  
retention!**

**Behavior  
change!**

**Measuring  
effectiveness!**



If you recognize a natural gas leak in a home or building, what should you do?

- a. OPEN WINDOWS
- b. CALL 911
- c. CALL COLORADO SPRINGS UTILITIES
- d. EXIT IMMEDIATELY
- e. TRY TO FIND OR FIX THE PROBLEM

IF YOU SMELL

GAS,

EXIT!





What are the three ways to recognize  
a natural gas leak?

- a. SMELL, SCAN, SEEK
- b. SMELL, SIGHT, SOUND
- c. SMELL, SURROUND, SURVEY
- d. SMELL, SHOW, SHADE
- e. I DON'T KNOW

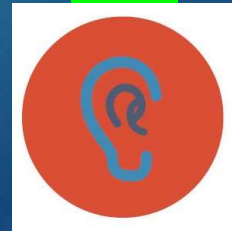
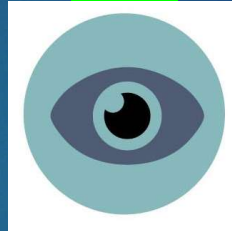
USE YOUR

SENSES:

✓ SMELL

✓ SIGHT

✓ SOUND





How do we use natural gas?

- a. FURNACES
- b. WATER HEATERS
- c. SPRINKLER SYSTEMS
- d. BOTH A AND B
- e. I DON'T KNOW



# Why we do what we do!

- Inform public about their community-owned utility
- Teach safety behaviors at a young age
- Encourage “each one teach one” philosophy
- Engage parents and guardians
- Empower any age group with tools to be safer

