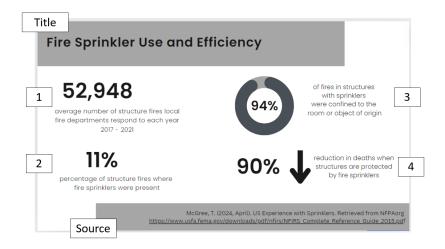


Analyze and Interpret Data

The Science of Fire Sprinklers

Directions: The infographic is organized in sections to help you analyze and interpret the information. Analyze each piece of data presented in this infographic. Guiding questions will support you in this parctice.



Analyze the title & source

1. Identify two goals of this data based on the title.

2. Locate and read the source for this data. Would you consider this a reliable source to discuss fire sprinklers? Why or why not?

Analyze fact 1

3. Use the data in a complete sentence.

Structure Fires Reported by State 2015-2019

State	Structure Fires
lowa	42,347
Washington	131,646
Georgia	201,108
New York	338,139
Texas	418,641
California	495,898

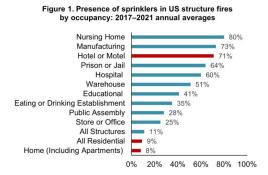
4. Consider the "Structure Fires Reported by State." Why do you think the author of this infographic chose to use an average

Data sourced from FEMA.gov, Fire Incidents for States and Counties

5. A structure fire can include residential, industrial, and commercial buildings. Why do we need to understand the types of fires included in this data?

Analyze fact 2

- 6. Read data point 3. What percentage of structure fires had sprinklers present in between 2017 and 2021?
- 7. Consider the data in figure 1. Have you seen sprinklers in any of these structures? Describe how the information in this data supports or contradicts your experience with fire sprinklers.
- 8. Why do you think you see sprinklers more often in nursing homes or hospitals?



9. Complete the sentence: A probable reason that 11% of structure fires have sprinklers is

Analyze facts 4 and 5

10. Read facts 4 and 5. What can you infer from these data points?.

Interpret the data

11. Write a claim **connecting** the use and effectiveness of fire sprinklers. Use 2-3 data points to support your claim.

12. **Problematize**: The National Fire Sprinkler Association states, "fire sprinklers save people and property." [Read more at (nfsa.org)]. If sprinklers are such an effective technology, why do you think they are only found in 11% of structure fires?

13. Reflect: The data that most stood out to me was______

_____. I found this surprising because_____.