



# Tips for Communicating Your Message

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# 1. Look Through Their Eyes

“Natural Resources”?



## 2. Clear Away Obstacles

# Some words with several meanings

Uncertainty

Nutrients

Organic

Sensitivity



# Writing for the Web Requirements

This page lists requirements for writing content for the EPA website.

## Key points:

- If you think you're ready to publish your page, remove at least 50% of the words.
- Make it immediately clear why (or for whom) the page exists.
- Make it scannable. Area headings and links should be visually distinct and meaningful.
- Write in plain, direct language. Use active voice. Do not write above an 8th-grade level.
- Write for the target audience.

## Use Less Text

- Fact: No matter how good your content,
  - your users will not read your web page. They will only scan it.
  - you're using too many words. Edit harshly.

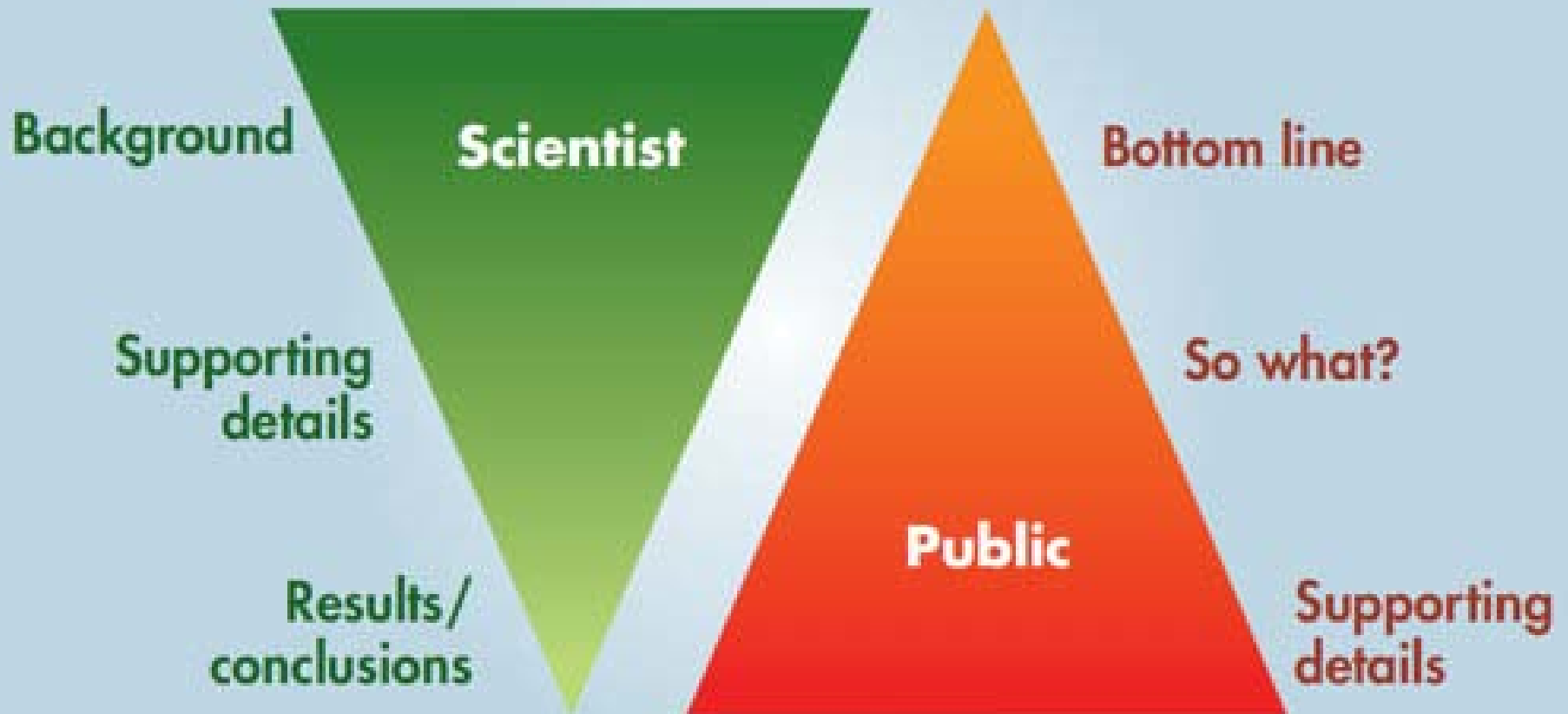
**Why does this page exist? Focus, focus, focus.**

## Related Training and Resources

### Training from HowTo.Gov

- [Plain Language in Practice: Writing for the Web](#)
- [What Not to Web: Plain Language](#)

# Article for your colleagues vs. article for the public



Publication Types

Order Publications

Search NIOSHTIC-2  
Research Database

eNews

Science Blog

Documents for Public  
Review

Peer Review Agenda

Regulatory Agenda

Docket

Press Releases/Updates

► **NIOSH Study of  
Firefighters Finds  
Increased Rates of  
Cancer**

Databases

Software

Video

**NIOSH Homepage**

NIOSH A-Z

Workplace Safety &  
Health Topics

Publications and Products

Programs

NIOSH Update:

October 17, 2013

## NIOSH Study of Firefighters Finds Increased Rates of Cancer

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A combined population of 30,000 firefighters from three large cities had higher rates of several types of cancers, and of all cancers combined, than the U.S. population as a whole, researchers from the National Institute for Occupational Safety and Health (NIOSH) and colleagues found in a new study.

The new findings are generally consistent with the results of several previous, smaller studies. Because the new study had a larger study population followed for a longer period of time, the results strengthen the scientific evidence for a relation between firefighting and cancer, the researchers said.

The findings were reported in an article posted on-line on Oct. 14, 2013, by the peer-reviewed journal Occupational and Environmental Medicine. The article is available online at <http://oem.bmj.com/content/early/2013/10/14/oemed-2013-101662.full> .

The researchers found that:

- Cancers of the respiratory, digestive, and urinary systems accounted mostly for the higher rates of cancer seen in the study population. The higher rates suggest that firefighters are more likely to develop those cancers.
- The population of firefighters in the study had a rate of mesothelioma two times greater than the rate in the U.S. population as a whole. This was the first study ever to identify an excess of mesothelioma in U.S. firefighters. The researchers said it was likely that the findings were associated with exposure to asbestos, a known cause of mesothelioma.

The study analyzed cancers and cancer deaths through 2009 among 29,993 firefighters from the Chicago, Philadelphia, and San Francisco fire departments who were employed since 1950. The study was led by NIOSH in collaboration with the National Cancer Institute and the Department of Public Health Sciences in the University of California at Davis. The study was supported in part by funding from the U.S. Fire Administration.

Firefighters can be exposed to contaminants from fires that are known or suspected to cause cancer. These contaminants include combustion by-products such as benzene and formaldehyde, and materials in debris such as asbestos from older structures.

The findings of the new study do not address other factors that can influence risk for cancer, such as smoking, diet, and alcohol consumption. In addition, few women and minorities were in the study population, limiting the ability to draw statistical conclusions about their risk for cancer.

In a second phase of the study, the researchers will further examine employment records from the three fire departments, to derive information on occupational exposures, and to look at exposures in relation to cancer incidence and mortality. Those findings, when completed, will be published in a



# Rethink PowerPoint

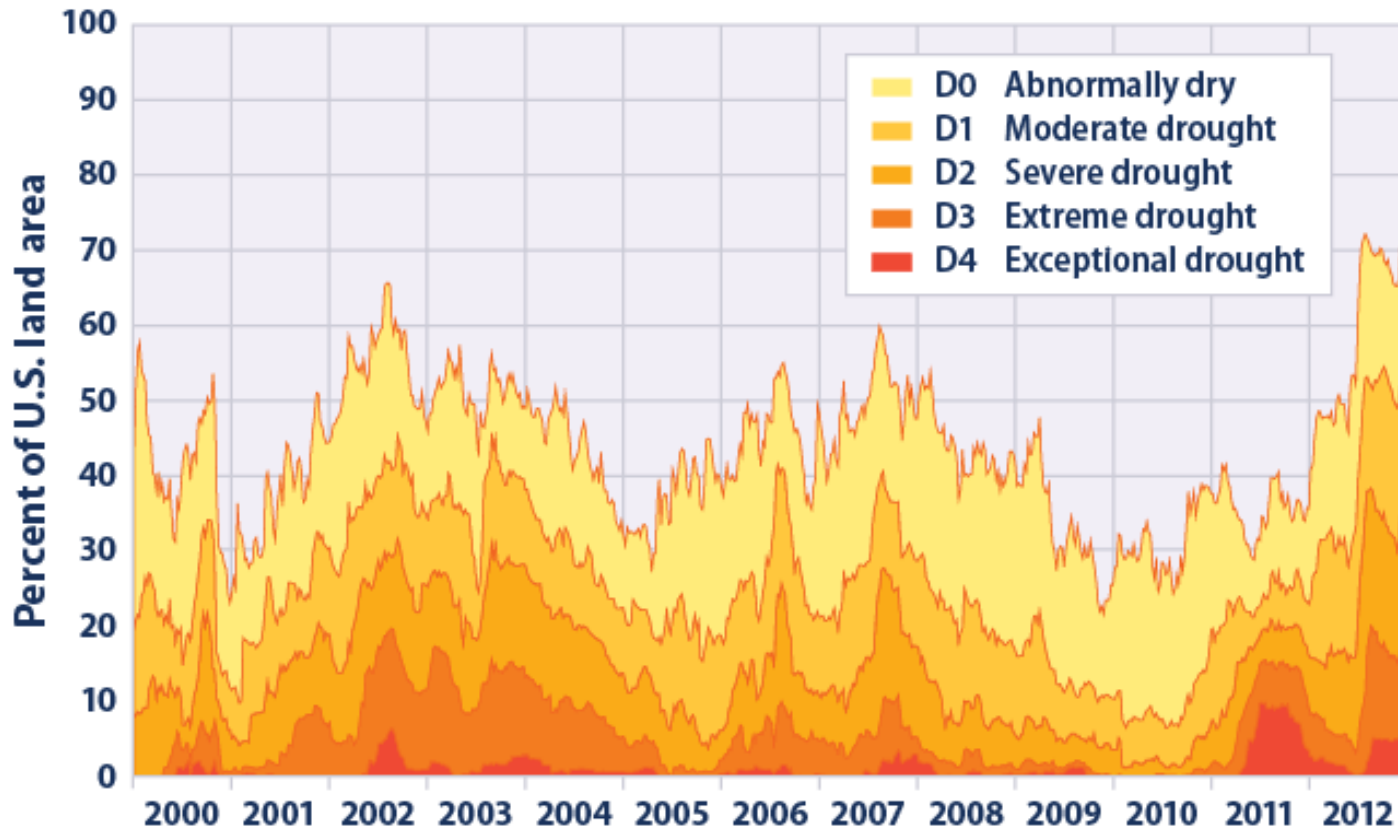


# U.S. Lands Under Drought Conditions, 2000-2012

- Meteorologists generally define drought as a prolonged period of dry weather caused by a lack of precipitation that results in a serious water shortage for some activity, population, or ecological system.
- Average drought conditions across the nation have varied since records began in 1895. The 1930s and 1950s saw the most widespread droughts, while the last 50 years have generally been wetter than average.
- Over the period from 2000 through 2012, roughly 30 to 70 percent of the U.S. land area experienced conditions that were at least abnormally dry at any given time.
- The years 2002, 2003, 2007, and 2012 were relatively high drought years, while 2001, 2005, 2009, and 2010 were relatively low drought years.
- In 2012, the United States experienced the driest conditions in more than a decade.
  - During the latter half of 2012, more than half of the U.S. land area was covered by moderate or greater drought.
  - In several states, 2012 was among the driest years on record.

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U.S. Lands Under Drought Conditions, 2000–2012





Link the Unfamiliar  
With the Familiar

# 3. Speak From the Heart

[http://youtu.be/yiC71m\\_pt4k](http://youtu.be/yiC71m_pt4k)

70% of Americans believe that scientists contribute a lot to the well-being of society.

# In Conclusion

- Know your audience—look through their eyes.
- Clear away the obstacles—unfamiliar words, too many words, abstraction.
- Show why *you* care—speak from the heart.

# These resources might be helpful.

- Burroughs Wellcome Fund. Communicating Science: Giving Talks. Second Edition. <http://www.bwffund.org/career-tools/communicating-science-giving-talks>
- Gope, G. and Swan, J. The Science of Scientific Writing. American Scientist. November-December 1990. <http://www.americanscientist.org/issues/pub/the-science-of-scientific-writing> and a summary at [http://twp.duke.edu/uploads/media\\_items/science-for-scientific-writing-handout.original.pdf](http://twp.duke.edu/uploads/media_items/science-for-scientific-writing-handout.original.pdf)
- Hassol, S. Improving How Scientists Communicate About Climate Change. Eos, Vol. 89, No. 11, 11 March 2008. <http://www.climatecommunication.org/resources/articles/improving-how-scientists-communicate-climate-change/>
- Holland, G. Improving Science Communication in an Era of Media Diversity (Draft) [http://www.mmm.ucar.edu/people/holland/files/Communicating\\_Science\\_Discussion\\_Paper\\_V2.4E.pdf](http://www.mmm.ucar.edu/people/holland/files/Communicating_Science_Discussion_Paper_V2.4E.pdf)
- Marshall, M. “Talk Nerdy to Me.” Science TEDTalk. 2012 <http://blog.ted.com/2012/10/11/6-tips-on-how-scientists-and-engineers-can-excite-rather-than-bore-an-audience/>
- Nisbet, M. Framing Science: A new Paradigm in Public Engagement. In L. Kahlor and P. Stout (Eds.), Communicating Science: New Agendas in Communication (pp. 40-67). New York: Routledge, 2011. [http://climateshiftproject.org/wp-content/uploads/2013/01/Nisbet2009\\_FramingScience\\_NewAgendasChapter.pdf](http://climateshiftproject.org/wp-content/uploads/2013/01/Nisbet2009_FramingScience_NewAgendasChapter.pdf)
- Reynolds, G. blog on presentation design (see entries on science presentations): <http://www.presentationzen.com/>
- Sackler Colloquium, The Science of Science Communication. National Academy of Sciences, May 2012. [http://www.nasonline.org/programs/sackler-colloquia/completed\\_colloquia/science-communication.html](http://www.nasonline.org/programs/sackler-colloquia/completed_colloquia/science-communication.html)
- Tips for Science Communication from 2011 Fame Lab finalists. <http://blogs.nature.com/ofschemasandmemes/2011/06/16/science-festivals-part-14>



“Thank you, thank you, Sam-I-Am!”