▶ **DIRECT FROM CDC** ENVIRONMENTAL HEALTH SERVICES

Tools to Help You Write Clear Environmental Health Messages

Editor's Note: The National Environmental Health Association (NEHA) strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, NEHA features this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the *Journal.*

In these columns, authors from CDC's Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.

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hy Clear Communication?

Environmental health communicators must be able to disseminate scientifically accurate, evidence-based information in language that their audiences can easily understand and act on. This responsibility is doubly true in today's media environment where public health practitioners face competition from sources of misinformation that have access to the megaphones of social media platforms. To help public health communicators craft clear messages, the Centers for Disease Control and Prevention (CDC) created two key resources: the CDC Clear Communication Index and the Everyday Words for Public Health Communication (see sidebar).

The National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) augmented these resources with two more that are tailored to environmental health professionals. These resources are the Clear Writing Assessment and the Environmental Health Thesaurus (see sidebar). In this column, we will explain how these tools were developed and illustrate how they can be applied to strengthen environmental health communication.

What Is the Clear Writing Assessment?

The Clear Writing Assessment was designed to give public health practitioners practical feedback on written material that targets nonspecialist audiences (Figure 1). When applied effectively, it ensures that documents are focused and concise, easily understood, and clearly organized.

The assessment is divided into three groups of questions:
1. The first group ensures that the writer is considering the reading level of their audience.
2. The second group addresses formatting to help readers efficiently understand and internalize key messages.
3. The third and last group of questions addresses clarity on the word, sentence, and paragraph levels, ensuring that the language in a document is communicating information as efficiently as possible.

How to Apply the Clear Writing Assessment

The assessment tool works best when paired with the CDC Clear Communication Index. Whereas the assessment focuses on plain language, the index focuses on health literacy. Combined, these tools will help you to create documents that effectively communicate with concepts and language that readers can readily digest and respond to.

The assessment asks objective yes or no questions based on an accompanying user guide that explains key principles of clear communication. Sample questions from each section are:
- If your document includes a necessary term your target audience might be unfamiliar with, did you explain the term in plain language?
- Did you use more space before and less space after each heading so it's clear how your content is chunked?

- Is the document written mostly in active voice (except for methods sections or other special circumstances described in the user guide)?

A score below 80 points means that a document needs further revision before it is ready for distribution to the public. For example, perhaps the author did not score a point for the use of active voice. Or they did not score a point for the question that asks, "Did you use pronouns like 'you' and 'we' to connect with the reader and make the tone more conversational?"

The following is a sample sentence that can be improved to address both of those omissions:

Before: It is uncertain whether the immune and developmental effects observed in rodents would manifest in humans. Some differences exist between how humans excrete PFAS compared to rodents.

After: We do not know if the immune and developmental effects seen in rodents exposed to PFAS would occur in humans. Humans and rodents differ to some extent in how they excrete PFAS.

Why Use a Plain Language Thesaurus?

When working in environmental health, we practitioners learn a vocabulary that is specific to our profession. We use terminology that is critical to our practice and that, over time, has become secondhand knowledge. It is easy to forget that words we often use are not accessible to the general public. This phenomenon is sometimes referred to as the "curse of knowledge" or the "curse of expertise" in social science literature (Newton, 1990).

Writing for the public requires that we describe concepts with language that is available to those without our specialized education or experience. To aid public health communicators in overcoming this challenge, NCEH/ATSDR created an Environmental Health Thesaurus. This online tool offers plain language alternatives for environmental health terms (e.g., biomarker, risk factor).

The following is an example of a sentence including scientific terminology that can be rephrased with everyday language.

Before: Ingesting bug repellent aerosols can lead to adverse health effects.

After: Some chemicals are sprayed into the air to kill bugs. Breathing in these chemicals can be harmful.

The improved sentence does away with the term "aerosols," which many people may not be able to define and instead describes it as "chemicals sprayed in the air."

Use These Free Tools

Writing for the public can challenge the communication habits we have developed as environmental health researchers and practitioners. Fortunately, there are concrete steps we can take to craft and revise documents according to clear communication principles. The heuristics developed by