

How CDC is promoting a clear communication culture

John Parmer, Cynthia Baur

*Centers for Disease Control and Prevention
Atlanta, GA, USA*

Correspondence to:

John Parmer
Centers for Disease
Control and Prevention
2500 Century Center
Parkway, Atlanta, GA
30345, USA
JParmer@cdc.gov

Abstract

Both the federal Plain Writing Act and the mission of the US Centers for Disease Control and Prevention (CDC) to protect and promote people's health require CDC to communicate clearly so that people can understand and act on the important health information it provides. Decades of research shows that health information and services are often unfamiliar, complicated, and technical, even for people with many years of formal education. Although individual skills are important, the actions of health professionals in communicating health information are influential as well. In response to both the challenges faced by those who need health information and the opportunities for improvement among those who provide health information, CDC is taking steps to promote a clear communication culture to make its health information and services accessible and understandable by the different audiences it serves.

Keywords: Plain language, Plain Writing Act, Clear communication, Health literacy

Introduction

The US Centers for Disease Control and Prevention (CDC) is responsible for communicating vital, scientifically sound health and safety information to millions of people every day. This information is often unfamiliar, complex, technical, and dependent on quantitative risk calculations that reflect population, not individual, level estimates. Despite these challenges, both CDC's mission to protect and promote people's health and the 2010 federal Plain Writing Act in the USA require CDC (and all US federal agencies) to write clearly so that people can understand and act on this information.¹ However, writing is only one way in which CDC communicates with the public. CDC staff also present information in community meetings, interview people exposed to infectious diseases or

harmful substances, and produce radio interviews, podcasts, and videos so that information is available to as many people as possible. CDC has committed to use plain language in all its communication formats, not just writing.

Plain language is one of several techniques CDC uses to make its information clear to different audiences. In addition to language and document organisation, a broad set of factors affect the clarity of CDC's health information. These include the types of actions and recommended health behaviours involved; the novelty and technical complexity of the information; the amount of information being presented; the status of scientific knowledge about the topic of interest; how numbers are used; and the ways statements of risk are included and explained. CDC applies insights from the fields of health literacy, health communication, numeracy, science literacy, risk communication, visual communication, and design to address these elements of clarity.

Health literacy is 'the degree to which individuals have the capacity to obtain, process, and understand the basic health information and services they need to make appropriate health decisions' (see the Patient Protection Affordable Care Act of 2010, Title V).² Limited health literacy is a national public health issue that affects almost 9 of 10 US adults.³ Health literacy depends on people's skills as well as the cognitive and communication challenges created by organisations that produce information for different audiences. Taken together, the Plain Writing Act, the public's limited health literacy skills, and the increasing recognition of organisations' responsibility in responding to the health literacy needs of its audiences have prompted the CDC Office of the Associate Director for Communication to promote an organisational culture that values clear communication as a matter of routine practice. We describe here six steps CDC is taking to promote a clear communication culture to make its health information and

services accessible and understandable by the different audiences it serves.

Step 1: Plan

The significance of clear communication in the achievement of US national health goals is visible in major health policy activities and federal legislation. The activities include the Healthy People 2020 Health Communication and Health Information Technology Objectives,⁴ the National Prevention Strategy,⁵ the National Stakeholder Strategy for Achieving Health Equity,⁶ and the Institute of Medicine's (IOM's) Roundtable on Health Literacy.⁷ The Patient Protection and Affordable Care Act includes some health literacy requirements, and writing government documents in plain language – one aspect of health literacy – is now federal law under the Plain Writing Act.

In congruence with these policies and strategies, the US Department of Health and Human Services (HHS), of which CDC is a part, published the National Action Plan to Improve Health Literacy in 2010, calling on health organisations to respond with their own strategic plans.⁸ The plan's first and second goals include strategies on plain language. CDC responded by creating its own health literacy action plan that cascades from the national plan.⁹ The CDC Health Literacy Council (Council) has representatives from across the agency's organisational units of Centers, Institute, and Offices (CIOs). Using agency-wide staff input, the Council drafted a high-level strategic action plan in November 2011 that guides the agency's approach to use clear communication and health literacy methods. The CDC action plan is organised around three health literacy goals and 18 supporting strategies. The three goals are:

1. To develop and disseminate health and safety information that is accurate, accessible, and actionable.
2. To integrate clear communication and health literacy in public health planning, funding, policy development, research, and evaluation.
3. To incorporate accurate, standards-based, and developmentally appropriate health and science information and curricula in educational settings from childcare through university levels.

Goals one and two include using clear communication for CDC materials and encouraging organisations that CDC interacts with to use clear communication. CDC's health literacy action plan also aligns with the HHS Plain Writing Act

implementation plan.¹⁰ For more information about CDC's health literacy goals, visit <http://www.cdc.gov/healthliteracy/planact/cdcplan.html>.

Step 2: Connect

The success of any plan to create and sustain a new organisational culture requires opinion leaders and gatekeepers to implement a strategic plan and persevere through the process. The Council is the primary connection between the agency's high-level action plan and the on-the-ground implementation. Council members work with their CIOs to:

- Apply the action plan's goals to their missions and audience.
- Provide technical assistance so that CIOs can tailor operational plans to align with the action plan.
- Assist the CIOs by developing guidance; proposing procedures, standards, and measures; and coordinating the planning and reporting processes.
- Provide CIOs with a list of resources to help them develop and implement their operational plans.

CDC's health literacy website (<http://www.cdc.gov/healthliteracy/>) is a major channel for connecting CDC staff, grantees, contractors, partner organisations, and other stakeholders with health literacy information and resources. In September 2014, CDC refreshed and expanded the website to include new online training courses, information on culture and health literacy, and more resources to develop materials.

Senior agency officials also reinforce plain writing by sponsoring and releasing staff for training, requesting briefings, and inviting presentations at staff meetings. For example, CDC's basic plain language training slides quote the CDC Director emphasising the importance of clear communication. CDC leadership continually reinforces the importance of complying with the Plain Writing Act through CDC's intranet, newsletters, and agency-wide announcements.

Another important connection for creating and sustaining a new organisational culture is that of an organisational champion to inspire, coordinate, and provide vision for the agency. The CDC Office of the Associate Director for Communication strives to maintain the agency's momentum by leading clear communication activities throughout the year. For example, in 2013, the Office of the Associate Director for Communication coordinated an agency-wide clear communication challenge to incentivise

the use of plain writing and clear communication. CIO activities included training staff in plain language, developing a clear writing checklist and guidance material, creating a clear writing thesaurus widget, and requesting that reviewers consistently require plain language in the materials they review.

Step 3: Train

The first goal of both the HHS Plain Writing Act implementation plan and the CDC health literacy action plan focuses on strategies for training staff in clear communication. These plans recognise that clear communication benefits everyone, and to be most efficient, staff should use clear communication methods at the beginning of the document or message development process. Some audiences, such as scientists and researchers, will benefit from more general use of clear communication methods, such as plain language. For a lay audience, staff may need to pay close attention to health literacy issues and must address conceptual and cultural differences, clearly explain scientific processes, and carefully express numbers and statements about threats or harm. CDC offers a range of training options to staff so that they can meet the communication needs of these different audiences.

To comply with the Plain Writing Act, CDC continues to train its existing workforce and introduce new employees to basic plain language techniques.

CDC’s Council members identify staff with regular duties in writing, editing, designing, and clearing documents for the public, as well as web developers, and train them in plain language.

Staff training options include in-person small group classes, on-demand online training from CDC and the US National Institutes of Health, and self-study with the plain language training slides and the Federal Plain Language Guidelines available from <http://www.plainlanguage.gov>.

CDC University, the in-house training unit, offers health literacy, clear communication, plain language, and web development courses to staff on a periodic basis and consults with individual organisational units to schedule training based on need. Council members identify and contact new employees to find out whether they will write, edit, design, review, or approve materials for the public. If so, the Council member refers the new employee to the training options. Figure 1 shows a checklist CDC uses to promote staff use of plain language. Course instructors encourage staff to post this checklist at their workstation and use it as a convenient reference to the Federal Plain Language Guidelines.

CDC also trains staff to recognise and address health literacy issues for different audiences. In 2014, CDC released four intermediate-level, online health literacy courses. The courses apply health literacy research insights to writing; using numbers and expressing risk information; creating easier to understand lists, charts, and graphs; and speaking with the public. Learners can take these online courses when it’s convenient and print a certificate of completion. The new offerings supplement an introductory course, Health Literacy for Public Health Professionals, and are located in the Find Training section of <http://www.cdc.gov/healthliteracy>.

In 2013, CDC implemented a new research-based tool called the Clear Communication Index (the Index) (<http://www.cdc.gov/ccindex/>), which helps staff to develop and assess the wide range of messages and materials CDC produces for its audiences. The Index references the Federal Plain Language Guidelines and expands the items considered for clear communication to include those related to behaviour recommendations, the use of numbers, and explanations of risk. It contains 20 items, each with a numerical score of 0 or 1. The individual scores are converted to an overall score of 0–100, with a higher score indicating more clarity. CDC has trained over 1000 CDC staff as well as staff at other public and private sector organisations to use this tool to create easy-to-understand materials for the lay public, health departments and

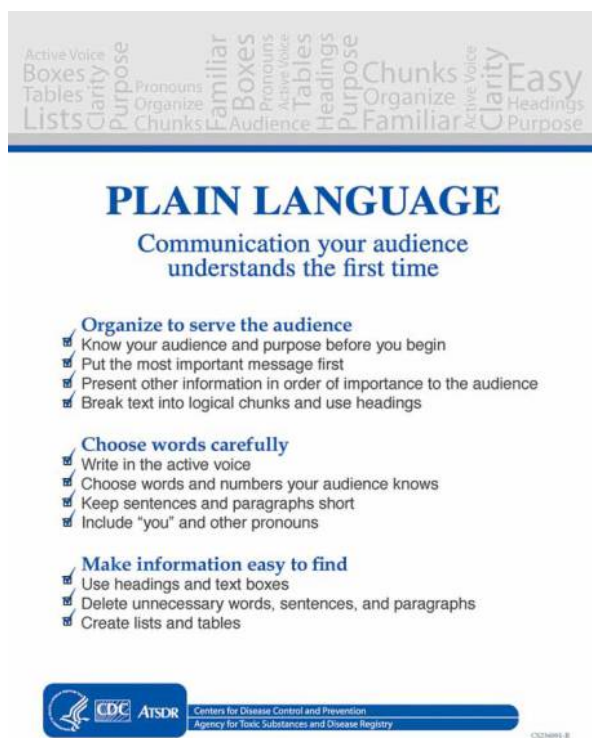


Figure 1: Plain language checklist for convenient CDC staff reference.

other partner organisations, and health care professionals.

Step 4: Produce

CDC produces many types of documents across a broad range of public health topics. The federal Plain Writing Act requires plain writing when these documents are for the public. The Council has identified categories of documents intended for public audiences. These include brochures, campaign messages, fact sheets, federal register notices, funding opportunity announcements (public announcements of opportunities to apply for federal government funding), infographics, media advisories, mobile apps, press releases, social media messages, webpages, and more.

The agency employs several strategies to ensure public documents follow plain language guidelines and use clear communication techniques. First, CDC includes clear communication review, including plain language principles, in the clearance process before documents are publicly released. Several CIOs use electronic systems to track and monitor documents as they move through the agency clearance process and incorporate plain language requirements in these systems. Second, staff apply the Index to the development of new materials and some CIOs require minimum Index scores before documents are released. Third, some staff use software to analyse documents for plain language elements like sentence length, passive voice, and jargon so that staff can revise them in accordance with the Federal Plain Language Guidelines. Finally, some communication offices test their materials with the intended audiences and ask for feedback on the language, organisation, and amount of information provided.

Step 5: Measure

CDC's success in creating a culture of clear communication depends on identifying where positive changes happen, creating feedback loops so that people perceive cultural shifts, and correcting the course towards desired goals when necessary. Measuring and tracking progress are critical components of initiating, improving, and sustaining the agency's efforts. CDC uses several mechanisms to track and measure progress in implementing the CDC health literacy action plan, which includes the plain language requirements of the law.

Once a quarter, Council members report relevant activities via an electronic fillable data form. Items on the data form directly align with the Plain Writing Act requirements and the goals and strategies outlined in the CDC health literacy action

plan. To track and measure staff training, the Council makes a considerable effort to enter all training offerings into an electronic learning management system that allows training participants to be confirmed and assigned credit. This learning management system then allows individual organisational units within the agency to run reports so that they can see their specific staff training data. Council members report the number of documents produced and cleared in plain language across more than 30 communication product categories, such as fact sheets, web pages, and reports. They also report audience testing methods, efforts to meet the information needs of people whose native language is not English, sharing of clear communication guidance and tools with funded partners and grantees, and other strategies from the CDC action plan.

Step 6: Report

An annual report card summarises the quarterly data collected and reported by the Council. This report summarises for CDC staff what the agency is doing to improve how it creates and shares health information with different audiences. Progress is reported on the 18 action plan strategies on a four-point scale: no, little, some, and substantial progress. In addition, CDC submits these data annually to the HHS for its annual Plain Writing Act report. The most recent reports are located on the HHS plain writing and clear communications webpage (<http://www.hhs.gov/open/recordsandreports/plainwritingact/>).

Conclusion

Training thousands of staff, creating and revising materials to meet clear communication criteria, and tracking health literacy-related activities is a large investment of agency resources. These activities require staff commitment at all levels, as well as an organisational champion to inspire, coordinate, and persevere through challenges. However, the impact of this investment is greater accessibility of the important health information CDC provides to the audiences it serves. The US National Action Plan to Improve Health Literacy observes that it will take everyone working together in a linked and coordinated manner to improve access to accurate and actionable health information and usable health services. By focusing on a broad set of health literacy issues that include the need for plain language and organisational change strategies, we are working to make CDC's information accessible, understandable, and useable by all the audiences that we serve.

Declaration

The findings and conclusions in this paper are those of the author(s) and do not necessarily represent the views of the Centers for Disease Control and Prevention, or the US Department of Health and Human Services.

References

1. Plain Writing Act of 2010, Pub. L. No. 111–274, 124 Stat. 2861. 2010 Oct 13 [cited 2014 Nov 14]. Available from: <http://www.gpo.gov/fdsys/pkg/PLAW-111publ274/pdf/PLAW-111publ274.pdf>.
2. Keeping America informed. Public Law 111–148. Patient Protection and Affordable Care Act. Washington, DC: US Government Printing Office; 2010 [cited 2014 Nov 14]. Available from: <http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>.
3. Kutner M, Greenberg E, Jin Y, Paulsen C. The health literacy of America's adults: results from the 2003 National Assessment of Adult Literacy (NCES 2006–483). US Department of Education. Washington, DC: National Center for Education Statistics; 2006.
4. Healthy People 2020 Health Communication and Health Information Technology Objective 1.1. US Department of Health and Human Services [cited 2014 Nov 14]. Available from: <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology/objectives>.
5. National Prevention Council. National prevention strategy. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General; 2011. [cited 2014 Nov 14]. Available from: <http://www.surgeongeneral.gov/initiatives/prevention/strategy/report.pdf>.
6. National Partnership for Action to End Health Disparities. National stakeholder strategy for achieving health equity. Washington, DC: US Department of Health and Human Services, Office of Minority Health; 2011. [cited 2014 Nov 14]. Available from: <http://minorityhealth.hhs.gov/npa/templates/content.aspx?vl=1&vllid=33&ID=286>.
7. National Academy of Sciences. Institute of Medicine. Roundtable on Health Literacy [cited 2014 Nov 14]. Available from: <http://www.iom.edu/Activities/%20PublicHealth/HealthLiteracy.aspx>.
8. National action plan to improve health literacy. Washington, DC: US Department of Health and Human Services; 2010. [cited 2014 Nov 14]. Available from: http://www.health.gov/communication/hlactionplan/pdf/Health_Literacy_Action_Plan.pdf.
9. CDC/ATSDR action plan to improve health literacy. Atlanta, GA: Centers for Disease Control and Prevention; 2014. [cited 2014 Nov 14]. Available from: <http://www.cdc.gov/healthliteracy>.
10. Plain writing act implementation plan. Washington, DC: US Department of Health and Human Services; 2012. [cited 2014 Nov 21]. Available from: http://www.hhs.gov/open/recordsandreports/plainwritingact/plain_writing_act_report.pdf.

Author information

John Parmer, PhD, is a health communication specialist at CDC. He uses insights from health literacy research to improve public health communication. His work in public health includes HIV testing promotion, collaborating with community partners to improve older adults' health, and using technology to reach audiences and promote healthy behaviours.

Cynthia Baur, PhD, is senior advisor for health literacy and the Plain Writing Act at CDC. She chairs the CDC Health Literacy Council and co-chairs the HHS Health Literacy Workgroup. She was lead editor of the US *National Action Plan to Improve Health Literacy* and co-developed CDC's Clear Communication Index.