

# 2 PROCESS FOR LITERATURE REVIEW

The systematic literature review included a comprehensive search of the literature, collection and incorporation of information submitted by the public, screening and assessment of the eligibility of the collected literature, and synthesis of the collected literature. Authors were provided with detailed guidance, including Information Quality Act (IQA) procedures and the following process for the literature review.

## A2.1 Identification of Literature Sources

The sources of literature and information assessed for this report were derived from a comprehensive literature search conducted by the National Institute of Environmental Health Sciences (NIEHS), literature submitted for consideration during public engagement opportunities, references included in the Third National Climate Assessment (2014 NCA),<sup>1</sup> and additional sources of information or data identified by the chapter authors.

NIEHS, coordinating closely with the Interagency Crosscutting Group on Climate Change and Human Health (CCHHG), developed an updated (2012–2014) Health Sector Literature Review and Bibliography as part of the larger literature review for the 2014 NCA. The NIEHS search covered multiple electronic databases (such as PubMed, Scopus, and Web of Science) as well as web search engines such as Google Scholar. Overall, searches were limited to publication dates of 2007 or later and to English-language citations. NIEHS conducted an eligibility screening of the information retrieved from the citation databases.<sup>2</sup>

A Federal Register Notice (FRN) published by the U.S. Environmental Protection Agency (EPA) on behalf of the U.S. Global Change Research Program (USGCRP) on February 7, 2014, called for submissions of relevant, peer-reviewed, scientific and/or technical research studies on observed and/or projected climate change impacts on human health in the United States.<sup>3</sup> A second FRN was published on April 7, 2015, announcing a public comment period, in which many commenters suggested additional sources of literature for consideration.<sup>4</sup> Chapter authors were responsible for screening and assessing the eligibility of literature submitted by the public using the same process developed by NIEHS.

In the process of performing the review and evaluating the literature, authors identified additional relevant literature, not captured in the NIEHS literature search or public call for information. Chapter authors screened and assessed the eligibility of these sources using the same process developed by NIEHS.

## A2.2 Screening for Eligibility

Throughout the process of drafting this assessment, guidance was provided to authors regarding the requirements of the IQA. In accordance with these requirements, chapter authors considered information quality when deciding whether or not to use source material in their chapter. The literature review guidance provided to authors required consideration of the following criteria for each source of information used in the assessment:

- **Utility:** Is the particular source important to the topic of your chapter?
- **Transparency and traceability:** Is the source material identifiable and publicly available?
- **Objectivity:** Why and how was the source material created? Is it accurate and unbiased?
- **Information integrity and security:** Will the source material remain reasonably protected and intact over time?

The Supporting Evidence sections of each chapter include “Traceable Accounts” for the Key Findings. The Traceable Accounts identify the key studies for explaining a particular issue or answering a particular question, and which form the basis of support for Key Findings. Key studies exhibit the general attributes defined below:

- **Focus:** the work not only addresses the area of inquiry under consideration but also contributes to its understanding;
- **Verify:** the work is credible within the context of the wider body of knowledge/literature or, if not, the new or varying information is documented within the work;

- **Integrity:** the work is structurally sound; in a piece of research, the design or research rationale is logical and appropriate;
- **Rigor:** the work is important, meaningful, and non-trivial relative to the field and exhibits sufficient depth of intellect rather than superficial or simplistic reasoning;
- **Utility:** the work is useful and professionally relevant; it makes a contribution to the field in terms of the practitioners' understanding or decision-making on the topic; and
- **Clarity:** it is written clearly and appropriately for the nature of the study.

Authors were responsible for certifying adherence to IQA requirements by applying the process outlined in the Author's Guidance documents (see Appendix 3: Report Requirements, Development Process, Review, and Approval).

**Recommended Citation:** USGCRP, 2016: Appendix 2: Process for Literature Review. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 301–302. <http://dx.doi.org/10.7930/J0FQ9TJT>

## References

1. Melillo, J.M., T.C. Richmond, and G.W. Yohe, Eds., 2014: *Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program, Washington, D.C., 842 pp. <http://dx.doi.org/10.7930/J0Z31WJ2>
2. USGCRP, 2012: National Climate Assessment Health Sector Literature Review and Bibliography. Technical Input for the Interagency Climate Change and Human Health Group. National Institute of Environmental Health Sciences. <http://www.globalchange.gov/what-we-do/assessment/nca-activities/available-technical-inputs>
3. 40 CFR Part 82, 2014: Request for Public Engagement in the Interagency Special Report on the Impacts of Climate Change on Human Health in the United States. U.S. Environmental Protection Agency on behalf of the United States Global Change Research Program. <http://www.gpo.gov/fdsys/pkg/FR-2014-02-07/pdf/2014-02304.pdf>
4. 80 FR 18619, 2015: Notice of Availability of Draft Scientific Assessment for Public Comment. U.S. Environmental Protection Agency on behalf of the U.S. Global Change Research Program. <https://www.federalregister.gov/articles/2015/04/07/2015-07629/notice-of-availability-of-draft-scientific-assessment-for-public-comment>