

Peer-review questions on the document titled "Approaches to Estimating the Waterborne Disease Outbreak Burden in the United States: Uses and Limitations of the Waterborne Disease Outbreak Surveillance System" (Docket ID No. EPA-HQ-ORD—2006-0666)

Chapter 1

- 1a. Comment on the level of detail in the Chapter, specifically on its adequacy in describing the purpose and usefulness of the document, the document's objectives, the waterborne disease outbreak surveillance system and the two measures of burden used in this effort. Does the document adequately describe the limitations of the database developed from the waterborne disease outbreak surveillance system from the perspective of developing disease burden measures? Does the document adequately cite and explain currently available methods for assessing disease burden? Are there other relevant methods related to disease burden need to be cited? Provide citations for any other significant materials or reports that need to be included in this chapter of the document.
- 1b. Comment on the adequacy of the Chapter to set the stage for subsequent discussions of the methods for estimating the epidemiologic burden and the monetary burden described in Chapters 2 and 4.
- 1c. Comment on the analytic rigor of the information presented in the Chapter.

Chapter 2

- 2a. Comment on the level of detail in the Chapter. Does the document adequately cite and explain the methods for estimating the epidemiologic disease burden associated with reported waterborne outbreaks. What other approaches need to be cited? Provide citations for any other significant materials or reports that need to be included in this chapter of the document. Were the appropriate epidemiologic endpoints selected for the analysis? Are there other endpoints that should be included?
- 2b. Based on your knowledge of the field, comment on the adequacy of the approaches used to develop alternative estimates for the specific epidemiologic measures. Are there other sources of such information that should be utilized in these comparisons? Do the methodological descriptions in this chapter adequately convey the methods used to an individual not expert in epidemiology or public health (i.e., If you are not an epidemiologist or public health practitioner, did the description adequately explain the methods used?)
- 2c. Comment on the scientific rigor of the analyses and information presented in the Chapter.
- 2d. Comment on the uses of surrogate data in this chapter. Were the surrogates adequate? Are there other more appropriate sources of such data?

Chapter 3

- 3a. Comment on the logic and scientific rigor of the results presented in the Chapter.
- 3b. Comment on the usefulness of the summary results (i.e., epidemiologic burden by agent, by water system type, water system deficiency, time period, and water source type) to analysts who are interested in the outcomes of waterborne outbreaks of infectious diseases. Does the document adequately describe the limitations of the epidemiologic burden analysis?
- 3c. Do the Tables and Figures capture the information in a manner that is useful to the reader?

Chapter 4

- 4a. Comment on the level of detail in the Chapter, specifically on its adequacy in citing and explaining the methods for estimating the monetary disease burden associated with reported waterborne outbreaks. What other approaches need to be cited? Provide citations for any other significant materials or reports that need to be included in this chapter of the document. Do the methodological descriptions in this chapter adequately convey the methods used to non-economists (i.e., If you are not a health economist, did the description adequately explain the methods used?)
- 4b. Based on your knowledge of the field, comment on the appropriateness of the economic methods and adequacy of the economic assumptions used in this chapter.
- 4c. Based on your knowledge of the field, comment on the adequacy of the discussion of alternative economic methods. Are there other sources of such information that should be utilized in these comparisons?
- 4d. Comment on the scientific rigor of the analyses and information presented in the Chapter. Note other methods, data or citations in the open literature that could be added to improve the document.

Chapter 5

- 5a. Comment on the logic and scientific rigor of the results presented in the Chapter.
- 5b. Comment on the usefulness of the summaries (i.e., monetary burden by agent, by water system type, water system deficiency, time period, and water source type) to analysts who are interested in the economic burden associated with waterborne outbreaks of infectious diseases. Does the document adequately describe the limitations of the monetary burden analysis?
- 5c. Do the Tables and Figures capture the information in a manner that is useful to the reader?

Chapter 6

- 6a. Comment on the choice of uncertainty analyses presented in the Chapter. Do they describe the key uncertainties in the analysis? Are there other analyses that should be conducted? If so, please identify appropriate data sources?
- 6b. Comment on the distributions selected for the analyses. Do these adequately capture uncertainty and variability they are intended to? Are there other assumptions that should be used in the analysis?
- 6c. Comment on the logic and scientific rigor of the results presented in the Chapter.
- 6d. Do the Tables and Figures capture the information in a manner that is useful to the reader?

Chapter 7

- 7a. Comment on the discussions developed in the chapter. Do they adequately describe the results of the analyses conducted? Do they describe the key uncertainties in the analysis?
- 7b. Comment on the adequacy of the summary of the previous results described in Chapters 2, 3, 4, and 6.
- 7c. Comment on the logic and scientific rigor of the results presented in the Chapter.
- 7d. Comment on the recommendations developed at the end of the Chapter.

Appendices

- 8a. Comment on the materials presented in the Appendices. Do they provide sufficient supporting information for the main document? Is there too much information provided (i.e., details in Appendices are not necessary for the readers and Appendix should be deleted)?
- 8b. Comment on the adequacy of the information provided; does it enhance the document?
- 8c. Are there other types of information that should be displayed in an Appendix (i.e., additional Appendices that would improve readability)?

Overarching Issues/Questions

- 9a. What is the reviewer's overall evaluation of the scientific content, readability and utility of the entire document? Provide any suggestions relative to structure or content that would improve the quality of the document.

- 9b. In general, comment on how well the text in the document supports the ideas shown in the Figures. How should the examples be modified to adequately illustrate the concepts?
- 9c. In general, comment on the consistency of the suggested approaches with current Agency practices from a technical perspective.
- 9d. What advice would you provide to EPA's Office of Water regarding the use of the results of this document?
- 9e. What would be the best ways to publish and present the information in the document so that it would be of most use to the intended users, e.g. risk assessors, risk managers and decision makers concerned with drinking water outbreaks?