

Tools for Environmental Health Investigations

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Community groups often wish to address environmental health concerns in their communities. The resources in this worksheet are intended to serve community-driven questions, goals, strategies, and desired outcomes.

Useful tools to navigate the **planning**, **doing**, and **understanding and communicating** aspects of environmental health studies are detailed in *Health Studies Guide: Is a health study the answer for your community?* as well as in the other resources referenced throughout this worksheet.

➤ **Planning** a study:

The first step in planning an environmental health investigation is determining the question a community wants to answer. Identifying a problem, understanding what community groups want to know about that problem, and determining why that information is important are key aspects in generating the best plan to address community concerns.

Chapter 2 Worksheet: Developing a Research Question

Check the boxes and fill in the blanks using the sample responses as examples.

1. Identifying your concern(s) (What):

Are you concerned only about an exposure? ____ yes ____ no
If yes, what exposure? _____

Are you concerned only about a health outcome? ____ yes ____ no
If yes, what outcome? _____

Are you concerned about a possible link between an exposure and a health outcome? ____ yes ____ no
If yes, what exposure? _____
And what outcome? _____

2. Who is the focus of concern?

What groups (for example, children ages 5-12, women under age 30, atomic energy workers)? _____

About how many people do you think are affected? A rough estimate is fine: Fewer than 100? hundreds? A thousand? Tens of thousands? Fill in an estimate for each:

_____ households
_____ adults
_____ children

Snapshot from Heath Studies Guide

➤ **Doing** the study:

Studies are designed to answer questions. Once a study type has been identified to best answer your research question (e.g., exposure assessment, risk assessment, disease mapping, door-to-door survey, in-depth interviews, a prospective cohort study,) you might also have begun to assemble a team to do the study. Members of the team should identify their roles. What is the level of involvement by team members? Is the community driving this study, or are academically trained researchers? How are decisions made? How is power shared?

➤ **Understanding & Communicating** results:

Maintaining open communication between researchers, study participants, and community members is a crucial part of the community-driven research process. It is important to determine the most appropriate method to present results back to community groups and facilitate discussion centered on those results as well as potential impacts.

Resource Highlight: **Planning**

The *Health Studies Guide* is designed to help community groups and individuals decide if a health study would be useful for their community. The appendix highlights additional resources for community groups and the first chapters of the guide are available in Spanish. The guide is free and available online: bu.edu/sph/health-studies-guide

Resource Highlight: **Doing**

The Public Lab is an organization that specializes in promoting citizen science. They are a non-profit organization that empowers community members to utilize DIY research techniques and open source data platforms in order to answer questions about the health of their own communities and advocate for change. publiclab.org

Resource Highlight: **Understanding & Communicating**

The Silent Spring Institute is an organization focused on exploring the interactions between environmental chemicals and women's health risks. They emphasize an "ethics of engagement," which is based on the idea that the individuals that participate in their studies have the right to access personal results in a context-appropriate format. They have developed a handbook, *When Pollution is Personal*, with useful tools on how to report results back to community members, how to navigate barriers to report back methods, and how to facilitate report back discussion.

Resource Overview

- Akwesasne Task Force on the Environment, Research Advisory Committee, Protocol for Review of Environmental and Scientific Research Proposals, 1996* – This protocol outlines the Research Advisory Committee Review Process established by the Akwesasne Task Force on the Environment in order to review research projects conducted within the Mohawk Nation community of Akwesasne. The protocol was developed as way to encourage community empowerment and control of the environmental and scientific research processes. sites.google.com/site/atfeonline/documents
- Community Engagement Core*, Boston University Superfund Research Program (BUSRP) – Visit our site for more resources for community groups and community-based research. bu.edu/sph/community-engagement-core
- Cancer Downstream: A Citizen's Guide to Investigating Pollution/Health Connections*, Steve Dickens, River Network – A thorough guide to developing community-driven health studies that includes information on everything from how to ask the right questions to effectively interpreting results.
- Community Environmental Health Assessment Workbook*, Environmental Law Institute – A workbook aimed to assist community organizations in evaluating and addressing the environmental needs of their communities. The workbook is primarily written for community leaders and organizers. eli.org/sites/default/files/eli-pubs/d10.09.pdf
- CommunityHealthStudies.org*. California DPH EHIB – An interactive website introducing users to environmental health issues and study designs using case studies. The website outlines when health studies may or may not be useful and also suggests alternative activities that can potentially improve the environmental health of a community.
- EJScreen*, EPA – An EPA web-based tool aimed at giving community members access to maps and reports pertaining to the health and environment of their communities. epa.gov/ejscreen
- Environmental Health Care Tool Kit*, Alaska Community Action on Toxics – A tool kit for communities that explains environmental contaminants, the potential health risks of those contaminants, and strategies to reduce exposures. The guide provides numerous factsheets that cover the specifics of various environmental contaminants, how they can affect humans, and suggestions on exposure prevention methods. akaction.org/tackling_toxics/body/preventive_medicine
- Health Studies Guide: Is a health study the answer for your community? A guide for making informed decisions*, Madeleine Kangsen Scammell and Gregory J Howard – A guide for community groups and individuals to better understand if a health study would be useful for their community. The appendix highlights numerous useful additional resources for community groups and the first chapters of the guide are available in Spanish. bu.edu/sph/health-studies-guide
- Negotiating Research Relationships with Inuit Communities: A Guide For Researchers*. Prepared by: Inuit Tapiriit Kanatami and Nunavut Research Institute, 2007 – A guide for researchers that aims to provide advice and information regarding communicating and collaborating with Canadian Inuit communities on research projects. The guide addresses general relationship-building and communication themes that can be applied to a broad range of disciplines and projects. inuitknowledge.ca/sites/ikc/files/attachments/2009_06_29_negotiating_research_relationships_researcher_guide_0.pdf
- Science and Health Environmental Network* – A network that provides information on legal and scientific principles to the environmental health movement. sehn.org
- Statistics for Action* – Aimed at a wide variety of audiences, the website provides videos, activities and exercises on environmental sampling as well as understanding test results and data. sfa.terc.edu
- The Public Lab* – Website with information on how to start research projects, discussions about ongoing and past projects, and data archives. This resource is focused on citizen science and DIY research techniques. publiclab.org
- The Story of Health*, The Collaborative on Health and the Environment – Interactive ebook that includes cases of asthma, leukemia, learning disabilities and environmental risk factors. The book uses the context of a fictional family reunion to help readers see health risks and preventative strategies across the lifespan. healthandenvironment.org/resources/story_of_health
- When Pollution Is Personal: Handbook for reporting results to participants in biomonitoring and personal exposure studies*, Silent Springs Institute – A handbook for environmental health professionals to reporting results back to communities and facilitating useful report back discussions. silentspring.org/resource/when-pollution-personal



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