

## HEA 466: Environmental Health Problems Lesson Plan

75 min. session in a classroom with technology

Background: Students will be working in groups on a research paper about the environmental health impact of a natural disaster (e.g. Hurricane Katrina, Love Canal, 9/11 attacks and first responders, etc.). They must use at least 3 peer-reviewed sources, but their paper must also address the who, what, when, where, and why of the event. They are also asked to address environmental justice and discuss the long-term environmental consequences of the event.

Learning Outcomes:

After the session, students will be able to:

- Describe the information lifecycle around a natural disaster/event
- Use advanced search strategies to find scholarly sources on a health problem/event

Introductions & Assignment (5 min.)

Information Lifecycle Card Sort Activity (5 min.)

Directions: In your group, analyze eight (8) sources about Hurricane Katrina and move the cards in a timeline to place them in chronological order.

Answer Key:

- Meteorologists and hurricane experts at The National Oceanic and Atmospheric Administration predict Hurricane Katrina's landfall and speed using satellite imaging.
- Experts and newscasters lead outreach efforts to the public and emergency management communities.
- Local and national news reports cover the aftermath of the storm to greater or lesser accuracy.
- The National Hurricane Center Releases the Tropical Cyclone Report: Hurricane Katrina 23-30 August 2005.
- Congress released a bipartisan report investigating the preparation for and response to Katrina.
- In-depth analyses of the event are published in popular and scholarly books.
- 5-7 years after the disaster, researchers interview pregnant women about their exposure to Katrina and find associations between damage and birthweight.
- Reference sources like Wikipedia collect materials about the event

Optional: Watch UNLV's video on "The Information Lifecycle" <https://vimeo.com/175421451>

Discussion (10 min.)

- Did your chronological order match up?
- What have you been told about Wikipedia? - It can actually be a great source to look at the references and find other credible sources about your topic!
- Why might it take longer to publish scholarly books or research articles? What editorial process do they go through? What does the peer review process look like?

### 3 Types of Sources & Where to Find Them (10 min.)

- Reference sources - Use for background information and to find other sources
  - Wikipedia
  - Environmental Studies Database
- Government & news sources - Use for authoritative facts and statistics
  - National Center for Environmental Health: <https://www.cdc.gov/nceh/>
  - site:gov in Google
  - news databases and filters
- Research studies - Use for in-depth analysis and evidence about health effects
  - PubMed
  - Health Science databases

### *Ecology* Style citation (10 min.)

- Finding example journal articles in the library's Journals A-Z list
- Peer review process and submission standards
- Example citation for a journal article
- Sac State citation guide: <https://csus.libguides.com/ecology>

### Activity (20-30 min.)

Directions: Use this form to find and describe three (3) sources for your topic.  
<https://csudh.libwizard.com/f/hea466>

Instructor also asks students to submit sources on a handout with an *Ecology* Style citation before the end of the class.

### Questions / Library Evaluation