



CONSORTIUM FOR RESILIENT GULF COMMUNITIES

Overview of Health Literature Search and Database

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In 2015, the Consortium for Resilient Gulf Communities (CRGC) began working to assess and address the impact of the 2010 Deepwater Horizon oil spill and the health, social, and economic wellbeing of Gulf Coast communities. To better understand the health effects of the spill on communities, the CRGC designed and administered the Survey on Trauma, Resilience, and Opportunity among Neighborhoods in the Gulf (STRONG), a telephone survey of residents. In designing the STRONG, it was vital that the team consult the available literature to understand what was known about the health effects of oil spills. Researchers therefore conducted a literature review on the health impacts of oil spills to identify both what was already known about the effects of oil spills and gaps in our knowledge. This document describes the literature search we undertook, which was initially conducted in 2016 and updated in 2019.

Although the Oil Spill Health Literature Database was designed primarily to inform the CRGC survey instrument, it has many other uses. It can aid researchers, health care professionals, policymakers, community leaders, and residents in their efforts to

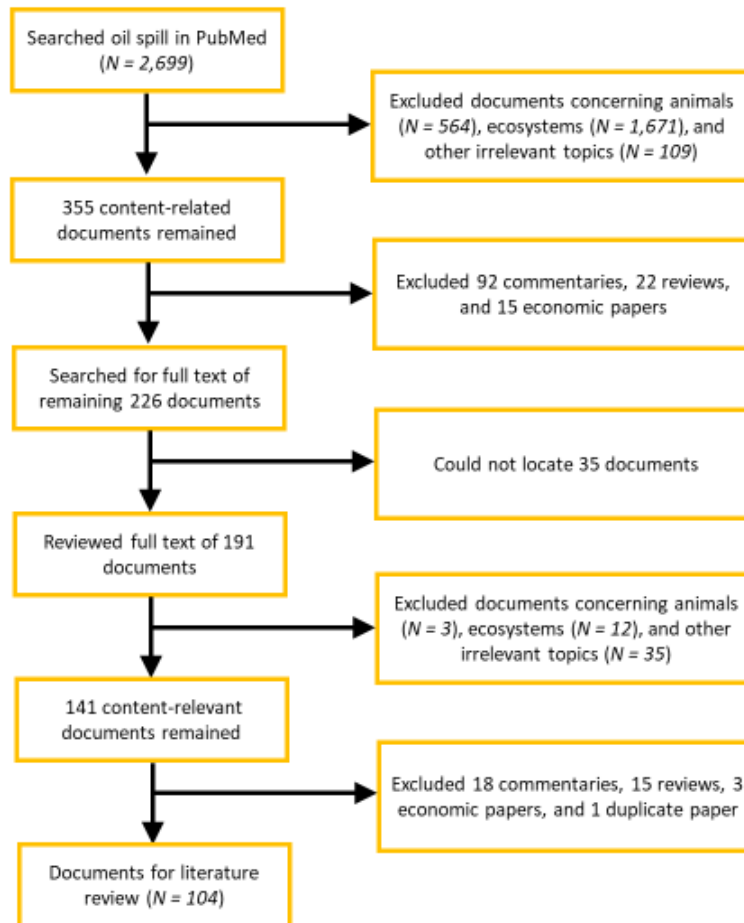
- **summarize what is known about public health after oil spills.** By presenting consolidated information in an easy-to-use format, the database allows audiences to extract and summarize relevant information to help orient their work within extant literature.

- **identify knowledge gaps relating to public health after oil spills.** By describing what previous research has accomplished in the area of public health and oil spills, the database also helps researchers recognize what gaps still exist in the literature and where additional research efforts are needed.

Literature Review Strategy

CRGC researchers identified what had been published about public health after oil spills by searching PubMed with no exclusion dates, using the term *oil spill*, which yielded 2,699 results across both searches. Then, we reviewed titles and abstracts to exclude irrelevant articles. We excluded papers primarily concerning animals ($N = 564$), ecosystems ($N = 1,671$), and other irrelevant topics ($N = 109$). Commentary ($N = 92$), reviews ($N = 22$), and economics papers ($N = 15$) were also excluded. A total of 226 results remained after applying the exclusion criteria. We could not locate 35 articles, so our full text review includes 191 papers that address public health impacts after oil spills. Based on full-text review, we excluded any articles in the above exclusion categories that were not identified in prior rounds ($N = 86$) and one article for which two versions appeared in the search, resulting in 104 articles being included in the literature review and resulting database.

FIGURE 1: Literature Review Selection Process



Database Construction

Prior to reading the papers, we identified several categorical domains, which included the referent oil spill, year of data, sample size, population, indicators of exposure, outcome measures, analytic strategy, and results. We created an Excel spreadsheet, filling information from each article into columns for the key domains. We enabled a drop-down menu so that users can narrow their searches.

	A	B	C	D	E	F
	Study Citation	Pre/Post-2010	Referent oil spill	Type of publication	Year of data	Sample size
1	Aiena, Erin M. E. Veronic. St Schuler "M Resili Traum. After th Horizon Study of Coasta			journal article	"months after the oil spill"	n = 1,119
3	Seekj Arata, C. Steven David Jo Scott (2000). technr disa applica conse resource the Ezzo spill. Buttk			journal article	1995	n = 125
4	Sara Schna Bagley Morris Allen, Volki Cor Assessment for Public Health Emergency Response (CASPER) one year following the Gulf Coast Oil	Post-2010	Deepwater Horizon	journal article	2011	n = 596

Using the Database

The database is provided as a downloadable Microsoft Excel spreadsheet. It is formatted to answer specific questions in a variety of ways. For example, a user can use the search function to locate all papers authored or coauthored by a particular author or using a particular analytical method. Additionally, the drop-down filter menus at the top of each column can be used separately or in combination to find subsets of papers. For example, a user could search under *Referent Oil Spill* for “Exxon Valdez” and under *Population–Short Form* for “Fishers” to find the papers concerning fishers affected by the *Exxon Valdez* oil spill.

Limitations of the Database

PubMed provides researchers free access to MEDLINE, which covers biomedical journals. It is the nation’s primary medical literature database; however, other literature on public health and oil spills may be omitted (e.g., research from the sociology or economics literature). In addition, the database was not updated after January 2019, so any articles published after that date are not contained in the database. Users should keep these limitations in mind when referencing the database.

Data Dictionary

Study Citation: Citation with the article's title, author(s), journal, publication date, and other publication details

Pre/Post-2010: Note indicating whether the oil spill described in article occurred before 2010 or during/after 2010

Referent Oil Spill: Name of the oil spill described in article

Type of Publication: Brief description of the type of publication the citation refers to

Year of Data: Description of the timeframe(s) that data was collected for the article

Sample Size: Number of study participants described in the article

Population and Sample Description: Description of population who was interviewed or surveyed for the study described in the article

Population Short-Form: Abbreviated description of sample population

Exposure to Spill: Description of the type of exposure to the referent oil spill that study participants experienced

Exposure Short-Form: Abbreviated description of exposure to oil spill

Outcome Measures: List of variables being studied or collected about and from participants (e.g., post-disaster psychological health)

Outcome Short-Form: Abbreviated description of outcome measures

Method: Description of method of data collection (e.g., cross-sectional, longitudinal)

Analytic Strategy: Description of primary analytical methods used to determine article findings

Relevant Results: Paraphrased summary of the key findings of the study