

SUPPORTING STATEMENT

Part B

Who's at Risk: From Hazards to Communities—An Approach for Operationalizing CDC Guidelines to Determine Risks and Define, Locate, and Reach At-Risk Populations in Public Health Emergencies

**Version 1
October 16, 2017**

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B. Collections of Information Employing Statistical Methods

1. Respondent universe and sampling methods

1.A Interviews with Key Informants

Potential respondent universe. The target universe for the interviews with key informants comprises five types of respondents: (a) Emergency public health and medical planners/emergency managers from the greater Los Angeles County region; (b) Emergency public health and medical planners/emergency managers from Utah; (c) Emergency public health and medical planners/emergency managers from Texas; (d) Emergency public health and medical planners/emergency managers from greater Philadelphia, Pennsylvania region; (e) Emergency public health and medical planners/emergency managers from New York City.

Sample Size. We will recruit no more than 100 emergency public health and medical planners from the five geographic regions identified.

Sampling and Selection. Sampling will be conducted through three primary mechanisms: (1) A convenience sample of partner local emergency health, medical and emergency management agencies from the States of California, Utah, Texas, New York and Pennsylvania of those who provided letters of support for this project; (2) Convenience sample of those who will be invited to participate by sub-contractor academic institutions; and (3) Convenience sample of those who will be participating in regional and national emergency public health and medical workshops, summits and conferences.

Type of Key Informant	Geographical Location	Maximum Number of Respondents
Emergency Public Health and Medical Planners/Emergency Managers	Southern California Region	30
	Utah	25
	Texas	25
	Philadelphia	10
	New York City	10
Total		100

Sampling Plan. Several formats for collecting information from these Key Informants will be used, including: paper-based questionnaire (survey), electronic-based questionnaire, and focus group surveys and discussions. Questions on the baseline tool (attachment A) may be modified and/or adjusted to better meet anticipated needs of audience and stakeholder groups.

Anticipated Response Rate. As participants will be specifically recruited to participate in this project, we anticipate a high rate of participant response and feedback.

1.B Public Health Center Clients Survey

Potential respondent universe. The Los Angeles County Department of Public Health (DPH) operates 14 Public Health Centers where a variety of services are provided to any individual within Los Angeles County. The population served by LA County DPH free walk-in Centers is a vulnerable population – many clients are low income, uninsured, or underinsured. Historically, catastrophic events disproportionately affect the most vulnerable, so understanding the demographics of the at-risk populations in a given jurisdiction is necessary to build better tools to prepare for and respond to emergencies.

Currently, the best available demographic data of residents for any jurisdiction in the United States come from the decennial census and American Community Survey (ACS) produced by the U.S. Census Bureau. It has been well-documented that the decennial census undercounts hard-to-reach and vulnerable populations and the ACS provides estimates from a sample of households. To better understand the demographics of LA County residents and their needs in a disaster, more current and reliable data are needed to supplement the available data from the U.S. Census Bureau.

Sample Size. We will recruit no more than 1,500 adult DPH Center Clients to participate in a paper-based survey of various demographic data elements. It is anticipated that those individuals participating in the Public Health Client Surveys will do so while waiting for Center services in Center waiting rooms, and as such will not require any additional cost or burden to their participation.

Sampling Plan. A systematic serial sampling protocol (i.e., the first 300 patients visiting each of 5 Centers) will be utilized to sample a total of 1,500 clients. Survey will be administered during normal business hours for approximately four weeks beginning in the Fall 2017. Information will be collected in DPH Center waiting rooms.

Anticipated Response Rate. 80% was achieved from a similar survey project we recently administered.

2. Procedures for the Collection of Information

2.A Interviews with Key Informants

Procedures for the Collection of Information

We will conduct qualitative interviews with emergency public health and medical planners and emergency managers to determine the appropriate hazard assessment methodology as well as assess the preferred process and features of the prototype hazard assessment tool. The interviews will consist of soliciting answers to the questions identified in Attachment A-Key Informant and Stakeholder Interview Survey through either self-administered surveys—electronic or paper based—or through small focus groups settings.

Information will be collected via: handwritten completion of paper-based questionnaires, electronic collection of questionnaire (via web-based survey mechanism, e.g. “Survey Monkey” and/or use of Excel-based tool), and hand-written completion of questionnaires used during focus group discussions.

The requested information will be collected at various locations, including, but not limited to: participants workplaces, emergency preparedness workshops, conferences and meetings, project specific workshops and focus groups. The information will be collected during normal business hours of participants’ work schedules. Information requested via electronic or paper-based questionnaire will take approximately 5 minutes to complete. Information request via focus group will take approximately 60 minutes to complete.

We will review survey results, interview notes, and transcripts from focus groups to determine desired and appropriate approach and process for hazard vulnerability assessment. Later, we will review data from the interviews to identify themes and common elements—both positive and negative—for improving the prototype hazard assessment, mapping and planning tool. To assure identification of appropriate themes and approach, the survey and focus group data will be reviewed independently by two raters.

2.B Public Health Center Clients Survey

Procedures for the Collection of Information

We will be surveying no more than 1,500 individuals who are Los Angeles County Public Health Center Clients in order to identify demographic and community based factors and variables that are important to determining the potential risk for negative health outcomes as a result of a public health or medical emergency. Individual survey information will be collected on self-administered paper-based surveys (see Attachment B—Public Health Center Clients Demographic Survey).

A systematic serial sampling protocol (i.e., the first 300 patients visiting each of 5 Centers) will be utilized to sample a total of 1,500 clients. Signed written consent will be waived because the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside the research context. A signed informed consent would provide more identifying information on the individual than what is currently proposed to collect.

The survey will be administered in both English and Spanish. Surveys will ask questions about personal and household demographics (transportation, language, family size and makeup, disability, and electricity dependence, etc.) of Center patients. The survey will be distributed to clients (ages 18 years and older) attending Department of Public Health Centers.

To maintain participant anonymity, a unique identifier will be assigned to each survey. Individual responses will not be shown to the participants or other medical staff. The data will

be entered into a secured database and de-identified data will only be disseminated and/or reported in aggregate form. Only personal identifying information to be collected will be zip code and/or nearest cross-street to residence. Following daily collection of information, data will be entered into a secured database by DPH project staff.

3. Methods to Maximize Response Rate and Deal with Nonresponse

3.A Interviews with Key Informants

We have already reached out and communicated to several local public health agencies throughout Southern California, Utah, Texas, Philadelphia, and New York to gain their support and agreement to participate in this survey. We have also reached out to our sub-contractor (University of Utah) who will be assisting with the recruitment and surveying of this target population and they are also discussing this project with potential participants. Thus, through these two mechanisms, we expect few—if any—problems with identification and recruitment of key informants. As the survey will only be administered to individuals who are willing participants, we do not anticipate any problems with non-response bias. These qualitative data collection efforts with key informants are designed to provide a broad range of feedback, but are not necessarily designed to be representative of *all* emergency public health and medical planners in the nation. Thus the experience of—and qualitative output from—the anticipated key informants is sufficiently broad enough that we do not anticipate any problems with non-response bias.

3.B Public Health Center Clients Survey

This survey will be anonymously administered exclusively to those individuals who are clients of DPH Health Centers. Many of the clients who use the free, walk-in clinics are low income, uninsured, or underinsured, thus at heightened and disproportionate risk for sustaining negative health outcomes during a public health emergency or disaster. Only those individuals willing to participate will be surveyed. From experience with other surveying projects involving similar target population groups, there is no observed significant difference between Clients who participate in surveys and those who do not.

We will be administering the survey over several (4) weeks, in five (5) different Health Centers, geographically distributed in Los Angeles County to ensure sufficiently broad enough cross-sectional sample of clients. DPH has previously employed this sampling strategy for representative cross-sectional study of clients.^{1,2} As DPH staff, we will have access to all potential survey participants who access the Health Center services.

¹ Piron, J Smith, L Simon P, Cummings P, Kuo, T. Knowledge, attitudes, and potential response to menu labelling in an urban public health clinic population. *Public Health Nutrition*. 2009; 13(4), 550–555.
doi:10.1017/S1368980009991303

We expect some difference between the Health Center Client survey data and demographic census data related to similar low-income, low/under-insured population groups. It is these differences that will better inform understanding what factors may contribute to increased hazard specific risk. If there are differences in the data we will catalog, analyze and report those differences in our findings. Those differences will also be incorporated into our hazard assessment tool, in order to better inform emergency public health planners of the potential emergency and disaster risks faced by low income communities.

4. Tests of Methods to be Undertaken

4.A Interviews with Key Informants

We conducted similar surveying of emergency public health and medical planners and emergency managers in previous projects, through both electronic surveys and informal interviews. The average time of administration for the survey was approximately 5 minutes. The informal interviews—akin to our planned focus groups—took approximately 60 minutes.

4.B Public Health Center Clients Survey

We conducted a similar survey with DPH Health Center Clients for another emergency preparedness related project. The average time for survey completion at all 5 Health Centers was 5 minutes.

5. Individuals Consulted on Statistical Aspects and Individuals Collection and/or Analyzing Data

1. Elizabeth Rubin, MPH, Risk Assessment Coordinator, Emergency Preparedness and Response Division, Los Angeles County Department of Public Health
2. Lisa Smith, MS, DrPH, Supervising Epidemiologist, Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health

References

Piron, J Smith, L Simon P, Cummings P, Kuo, T. Knowledge, attitudes, and potential response to menu labelling in an urban public health clinic population. *Public Health Nutrition*. 2009; 13(4), 550–555. doi:10.1017/S1368980009991303

² Redelings D et al. Knowledge, attitudes, and beliefs about seasonal influenza an H1N1 vaccinations in a low-income, public health clinic population. *Vaccine*. 2011. 30 (2) 454– 458. doi:10.1016/j.vaccine.2011.10.050

Redelings D et al. Knowledge, attitudes, and beliefs about seasonal influenza an H1N1 vaccinations in a low-income, public health clinic population. *Vaccine*. 2011. 30 (2) 454– 458. doi:10.1016/j.vaccine.2011.10.050