

## "They Blew the Levee": Distrust of Authorities Among Hurricane Katrina Evacuees

Kristina M. Cordasco, MD, MPH David P. Eisenman, MD, MHS Deborah C. Glik, ScD Joya F. Golden, BA Steven M. Asch, MD, MPH

Key words: Hurricane Katrina, disaster planning, trust, qualitative research.

O n August 29th, 2005, Hurricane Katrina made landfall just east of New Orleans, Louisiana. That night and the next day, levees in New Orleans collapsed, resulting in flooding of 80% of the city, with water levels reaching to the rooftops in many areas.<sup>1</sup> Despite strong evacuation warnings, followed by a mandatory evacuation order,<sup>2</sup> over 100,000 greater New Orleans residents failed to evacuate prior to the hurricane's landfall.<sup>3</sup>

Distrust of authorities, among numerous other factors,<sup>4–5</sup> seems likely to have played a role in New Orleans residents' reactions to evacuation warnings and public health authorities' advice. Prior to the hurricane, 72% of New Orleans residents were of minority race or ethnicity<sup>6</sup> and there is a long history of minority groups in the United States distrusting the medical and public health leadership.<sup>7–9</sup> Furthermore, distrust of authorities among New Orleans' impoverished residents is rooted in local history. In 1927, The Great Mississippi Flood was threatening to destroy New Orleans, including its crucial downtown regional financial institutions. To avert the threat, and in part to stabilize the financial markets, it was decided to perform a controlled break of the New Orleans levees, thereby selectively flooding poor areas and saving financial institutions.<sup>10</sup> This event lives on in the memories and oral history of the residents of the deliberately flooded areas.<sup>11</sup>

Faced with the knowledge that distrust hampers the success of recommended evacuations and other disaster responses, disaster and public health officials must

**KRISTINA CORDASCO** is a Clinical Scholar in the UCLA/Robert Wood Johnson Clinical Scholars Program and can be reached at 911 Broxton Ave., 3rd Floor, Los Angeles, CA 90024; (310) 794-2206; kcordasco@mednet.ucla.edu. **DAVID EISENMAN** is an Assisstant Professor in the Department of General Internal Medicine and Health Services Research and **DEBORAH GLIK** is a Professor in the Department of Community Health Science, School of Public Health, both at UCLA. **JOYA GOLDEN** is a Health Research Specialist at the VA Greater Los Angeles Health Care System, with which **STEVEN ASCH** is also affiliated. Dr. Asch, additionally, is an Associate Professor at UCLA and is affiliated with RAND Health.

learn how to build trust,<sup>12-13</sup> a complex and multidimensional phenomenon.<sup>14</sup> Research centered in health care settings has identified several components of trust, defined as the expectation that others will act in one's interests, including fiduciary responsibility, honesty, competency, confidentiality, and equity.<sup>15</sup> Residents' planning and response to Hurricane Katrina illustrate many elements of trust and distrust as they relate to disaster response and may provide lessons with policy implications.

The salience of trust and distrust was vividly demonstrated in interviews we performed from September 9th through 12th, 2005, days 11 through 14 after Louisiana landfall of Hurricane Katrina. As part of a study of the facilitators and barriers to evacuation,<sup>4</sup> we interviewed 58 English-speaking adults who were living in Louisiana prior to landfall of Hurricane Katrina and currently receiving shelter in one of three Houston, Texas, evacuation centers (The Reliant Center, The Astrodome, and The George R. Brown Convention Center). Because our semi-qualitative interviews did not include specific queries about trust and distrust, we were struck by the frequency and depth of distrust reflected in the spontaneous statements of the evacuees we interviewed. This report is intended to describe and contextualize those statements.

Not surprisingly, *competency*, the belief in another's qualifications to perform a specific act, was the category of distrust that was mentioned most frequently by interviewees. All levels of authority, from the federal and local government officials, to the emergency workers, were the subjects of these statements. The perceived incompetence was summed up in the statement of one participant who said, "They could of did a lot better than what they did." Another said "the whole deal was a total letdown."

Several people went further when discussing their distrust by addressing a second element of trust, perceived equity. The equity component of trust is the belief that one is being treated fairly, without consideration of class, race, gender, or other characteristics.<sup>9,16</sup> Seven people told us that they believed that the preparations or response were performed ineffectively or slowly because of the race or socioeconomic composition of their neighborhood. One person stated:

If the President would have stepped in when they give that evacuation just like they were going to send six million dollars to save a whale, send all our men to Iraq, and send food and shelter and money over there, why couldn't he do it for the poor neighborhoods?

Distrust was expressed not only for government leaders but also for the people working on the evacuation. One person said that her family's signals for help were ignored by rescuers; instead of responding to their signals, "the helicopters were going back and forth getting people from the richer neighborhoods." Another perceived that he was discriminated against once he did receive help, recalling:

I got in one of the military trucks and it dropped us off in the middle of the interstate because Jefferson Parish, which is the neighboring parish, they made it clear they didn't have any water, they didn't have any shelter, they didn't have any food. So what they're saying is they didn't want any of Orleans Parish residents in their parish. See, Orleans Parish is 87% Black and Jefferson Parish is predominately White, so they didn't want that there. The fiduciary component of trust, in which people trust others to act with their best interests and well being in mind, was an element of many evacuees' distrust.<sup>15-16</sup> Those who commented on this generally linked it to economic issues, and not race. For instance, the common belief that the rich are privileged over the poor in disaster response is illustrated by one man's comment:

I've seen it on floods. We had some floods a few years back and you either take out this whole bunch of factories and the whole state's economy or 25 starving families . . . So what do they do? They knock a hole in the levy over here and knock these people out of pocket, destroy them, and they keep the big money in.

Another interviewee expressed doubt that the officials had acted in the best interests of the public with the statement "they could have saved people if they really wanted to save people."

A striking element of distrust expressed by interviewees was perceived dishonesty, or a lack of truthfulness and sincerity. Eight people we interviewed did not believe the reports in the media and claims of the authorities that the flooding in their neighborhoods came from the levees being overwhelmed by storm waters. Two people stated that they believed that the water was diverted into the poor neighborhoods to save the rich neighborhoods. Explaining how "the politicians broke the pump," one individual said: "They let the waters go in the poor neighborhoods and kept it out of the rich neighborhoods, like that French Quarter where tourists go at." Six people went further and stated that they believed that the levees were intentionally broken. One person stated:

He sacrificed New Orleans. He cut that 17th bridge, because you've got to sacrifice something. Donald Trump is putting the tower on Canal Street downtown and they saved the French Quarter and the Garden District, the historical areas, the rich people, where the money is coming from, casinos and all that. And they drowned out all the poor people and the lower-middle class working people . . . And they do that all over the country, not just in New Orleans . . . they do stuff and then they lie, lie.

Another person connected what he perceived as the breaking of the levees to issues of race, saying:

I believe they do these things intentionally . . . so they can flood out those Black neighborhoods . . . because every time they have a hurricane, it always be that way. You know?

Honesty and dishonesty encompass what is not said as well as what is said. Some evacuees felt useful information had been withheld from them. "I heard from some people who watched the CNN news that these people knew about this hurricane a month ago."

These statements must be viewed in light of the participants having just experienced a horrific trauma, which clearly influenced their interpretations of events. In situations of fear and uncertainty people give more credence to negative perceptions.<sup>17</sup> Furthermore, as participants were living collectively and exchanging information and perspectives, some individuals' distrust may have been amplified by conversations with other people living in the shelter. It is not possible from our interviews to separate this element of blame as stemming from a coping mechanism versus a reflection of underlying distrust.

Despite these limitations, the evacuees' interpretations of events after Hurricane Katrina reflect an underlying, profound distrust of authorities. Evacuation and post-evacuation experiences heightened this distrust for some individuals. Given the importance of trust in disaster preparedness and communications,<sup>18–19</sup> addressing existing distrust is critical to mounting effective responses in the future.

Each of these elements has specific implications for disaster planning and risk communication. The level of a community's distrust will be partially buffered based on the extent to which authorities display competency, fairness, empathy, honesty, and openness prior to a disaster.<sup>20</sup> The historical depth of fiduciary concerns highlights the necessity of improving trust now between public officials and vulnerable communities where distrust may be long-standing and chronic.<sup>7,13,21</sup> For instance, public health and emergency response officials charged with planning for disasters, from natural disasters (e.g., hurricanes, pandemic flu) to terrorist events should include community representatives—drawn from churches, social clubs, schools, or labor unions—at all levels of disaster planning and response. The success of involving churches in African American communities in other public health endeavors buttresses this recommendation.<sup>22-23</sup> Ensuring that authorities are viewed as honest requires addressing both the completeness of information as well as its accuracy.<sup>24</sup> People are more likely to trust authorities whom they view as genuinely concerned about the welfare of others.<sup>25</sup>

As has been previously proposed,<sup>9,25</sup> the issue of disaster planning and communications is especially amenable to the methods of community-based participatory research (CBPR), in which partnerships between researchers and communities are formed. Capacity-building, exchange of information, and enhancement of trust are central to the process.<sup>26</sup> Community advisory boards are formed to impart cultural knowledge, provide transparency, and strategize and assist in implementation and dissemination of results.<sup>25</sup> Community-based participatory research differs from traditional research methods in that it fosters social change as part of the research method and has been shown to be particularly effective in addressing public health issues in historically disenfranchised populations.<sup>27–28</sup> In conclusion, public health authorities must attend to matters of distrust when crafting policy and direct outreach for disaster preparedness and communications.

## Acknowledgments

We thank the evacuees who generously volunteered their time and responses during the most difficult of experiences. In addition, this project was made possible through funds awarded to D. Eisenman by the Natural Hazards Research and Applications Information Center from the National Science Foundation (CMS 0408499), an award to Dr. Eisenman from the Centers for Disease Control and Prevention (K01-CD000049-02), and an award to Dr. Cordasco from The Robert Wood Johnson Clinical Scholars Program. The authors have no financial conflicts of interest with this project.

## Notes

- 1. The Brookings Institute. Hurricane Katrina Timeline. Washington, DC: The Brookings Institute, 2005 Oct. Available at http://www.brookings.edu/fp/projects/homeland/katrinatimeline.pdf.
- 2. Murphy B, Rad S, Bryant S, et al. Houston: buses bring thousands from Superdome to Astrodome. The Houston Chronicle. 2005 Sep 1:A1.
- 3. Nigg JM, Barnshaw J, Torres MR. Hurricane Katrina and the flooding of New Orleans: emergent issues in sheltering and temporary housing. Ann Am Acad Polit Soc Sci. 2006;604(1):113–28.
- 4. Eisenman DP, Cordasco KM, Asch SM, et al. Disaster planning and risk communication with vulnerable communities: lessons from Hurricane Katrina. Am J Public Health. (In press.)
- Brodie M, Weltzien E, Altman D, et al. Experiences of Hurricane Katrina evacuees in Houston shelters: implications for future planning. Am J Public Health. 2006 Aug: 96(8):1402–8.
- U.S. Census Bureau. State & County QuickFacts: New Orleans (city), Louisiana. Washington, DC: U.S. Census Burea, 2007. Available at http://quickfacts.census.gov/ qfd/states/22/2255000.html.
- 7. Jacobs EA, Rolle I, Ferrans CE, et al. Understanding African Americans' views of the trustworthiness of physicians. J Gen Intern Med. 2006 Jun;21(6):642–7.
- Corbie-Smith G, Thomas SB, Williams MV, et al. Attitudes and beliefs of African Americans toward participation in medical research. J Gen Intern Med. 1999 Sep; 14(9):537-46.
- 9. Eisenman DP, Wold C, Setodji C, et al. Will public health's response to terrorism be fair? Racial/ethnic variations in perceived fairness during a bioterrorist event. Biosecur Bioterror. 2004;2(3):146–56.
- 10. Barry JM. Rising tide: the great Mississippi flood of 1927 and how it changed America. New York: Simon & Schuster, 1997.
- 11. Brinkley D. The great deluge: Hurricane Katrina, New Orleans, and the Mississippi Gulf Coast. New York: William Morrow & Co., 2006; p. 8.
- 12. O'Toole T, Mair M, Inglesby TV. Shining light on "Dark Winter." Clin Infect Dis. 2002 Apr 1;34(7):972–83.
- 13. Blanchard JC, Haywood Y, Stein BD, et al. In their own words: lessons learned from those exposed to anthrax. Am J Public Health. 2005 Mar;95(3):489–95.
- 14. Goold SD. Trust, distrust and trustworthiness. J Gen Int Med. 2002 Jan;17(1): 79-81.
- 15. Thomas CW. Maintaining and restoring public trust in government agencies and their employees. Administration and Society. 1998;30(2):166–93.
- 16. Hall MA, Dugan E, Zheng B, et al. Trust in physicians and medical institutions: what is it, can it be measured, and does it matter? Milbank Q. 2001;79(4):613–39.
- 17. Covello VT, Peters RG, Wojtecki JG, et al. Risk communication, the West Nile virus epidemic and bioterrorism: responding to the communication challenges posed by the intentional and unintentional release of a pathogen in an urban setting. J Urban Health. 2001 Jun;78(2):382–91.
- 18. Quinn SC. Hurricane Katrina: a social and public health disaster. Am J Public Health. 2006 Feb;96(2):204.
- 19. Quinn SC, Thomas T, McAllister C. Postal workers' perspectives on communication during the anthrax attack. Biosecur Bioterror. 2005;3(3):207–15.

- 20. Wray R, Rivers J, Whitworth A, et al. Public perceptions about trust in emergency risk communication: qualitative research findings. Int J Mass Emerg Disasters. 2006 Mar;24(1):45–75.
- 21. Boulware LE, Cooper LA, Ratner LE, et al. Race and trust in the health care system. Public Health Rep. 2003 Jul-Aug;118(4):358–65.
- 22. Davis DT, Bustamante A, Brown CP, et al. The urban church and cancer control: a source of social influence in minority communities. Public Health Rep. 1994 Jul-Aug;109(4):500-6.
- 23. Yanek LR, Becker DM, Moy TF, et al. Project Joy: faith based cardiovascular health promotion for African-American women. Public Health Rep. 2001;116 Suppl 1:68–81.
- 24. Glass TA, Schoch-Spana M. Bioterrorism and the people: how to vaccinate a city against panic. Clin Infect Dis. 2002 Jan;34(2)217–23.
- 25. Peters RG, Covello VT, McCallum DB. The determinants of trust and credibility in environmental risk communication: an empirical study. Risk Anal. 1997 Feb;17(1):43-54.
- 26. Israel BA, Eng E, Schulz AJ, et al. Introduction to methods in community-based participatory research for health. In: Israel BA, Eng E, Schulz AJ, et al., eds. Methods in community-based participatory research for health. San Francisco: Jossey-Bass, 2005.
- 27. Themba MN, Minkler M. Influencing policy through community based participatory research. In: Minkler M, Wallerstein N, eds. Community-based participatory research for health. San Francisco: Jossey-Bass, 2003.
- 28. O'Toole TP, Aaron KF, Chin MH, et al. Community-based participatory research: opportunities, challenges, and the need for a common language. J Gen Int Med. 2003 Jul;18(7):592–4.