

## Levels of Serious Mental Illness in Katrina Survivors Doubled

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According to the most comprehensive survey yet completed of mental health among Hurricane Katrina survivors from Alabama, Louisiana, and Mississippi, the proportion of people with a serious mental illness doubled in the months after the hurricane compared to a survey carried out several years before the hurricane. The study also found that thoughts of suicide did not increase despite the dramatic increase in mental illness.

The authors suggest that this low rate of suicide thoughts is due to optimistic beliefs about the success of future recovery efforts. The research, led by investigators from Harvard Medical School (HMS), was published in a special online edition of the Bulletin of the World Health Organization: <http://www.who.int/bulletin/en/>

"The increase in mental illness among Katrina survivors is not surprising, but the low suicidality is a surprise," says Ronald Kessler, PhD, professor of health care policy at HMS and lead author of the study. "Our concern, though, is that this lowering of suicidal tendencies appears to be strongly associated with expectations for recovery efforts that might not be realistic."

This report is the first in a planned series based on the Hurricane Katrina Community Advisory Group, a statistically representative sample of hurricane survivors participating in ongoing tracking surveys to monitor the pace and mental health effects of hurricane recovery efforts. The National Institute of Mental Health and the Office of the Assistant Secretary of Health and Human Services for Planning and Evaluation fund the project.

To estimate the influence of Hurricane Katrina on the mental health of survivors, the researchers compared results of the post-Katrina survey with a survey carried out several years earlier that used the same assessment of mental illness. The earlier survey was the 2001-03 National Comorbidity Survey Replication (NCS-R), taken every 10 years to assess the mental health of the country. The NCS-R, although carried out throughout the entire country, included 826 respondents in the area subsequently affected by hurricane Katrina. The NCS-R, which is managed by the same HMS research team overseeing the Katrina project, was administered face-to-face, and had a 70 percent response, or cooperation, rate.

The post-Katrina survey included a completely separate sample of 1,043 individuals who agreed to participate in the ongoing project. Interviewers reached participants by random-digit dialing of phones working in the eligible counties and parishes prior to the hurricane (if survivors relocated, calls were forwarded to their new locations), and from telephone numbers provided by the American Red Cross from individuals requesting assistance.

The post-Katrina survey was carried out between January 19 and March 31, 2006 and had a response rate of 41.9 percent. Although this is a relatively low response rate in comparison to typical one-shot surveys, it is considerably higher than the response rates obtained in more conventional consumer panel surveys. A weight was applied to the survey to adjust for observed differences between respondents and non-respondents, as non-respondents tended to have somewhat higher levels of trauma exposure and hurricane-related psychological distress. Other

weights were added to account for the household participant selection and any discrepancies between the sample and the population based on data obtained from the US Bureau of the Census.

In addition to identically worded questions asked of the pre- and post-Katrina respondents, the post-Katrina survey also assessed "cognitions" found in previous research to predict adjustment to disasters. Mental illness was assessed with a widely accepted screening scale that can distinguish between serious and less serious cases. To validate the estimates of mental illness, trained clinical interviewers carried out follow-up assessments of depression, post-traumatic stress, panic, anxiety and other mental disorders in a random sub-sample of survey respondents. Suicide thoughts, plans, and attempts were assessed with a standard battery of questions about these outcomes.

Kessler and his team found that post-Katrina survey respondents were significantly more likely than respondents in the earlier survey to have either serious mental illness (11.3 percent versus 6.1 percent) or mild to moderate mental illness (19.9 percent versus 9.7 percent). They also found that the prevalence of suicidal thoughts given mental illness was significantly lower in the post-Katrina survey than the NCS-R.

The team discovered a strong relationship between the comparatively low rate of suicide thoughts and the existence of positive cognitions among Katrina survivors, especially with cognitions regarding increased sense of meaning and purpose in life and increased realization of inner strengths. For mentally ill post-Katrina survey respondents who did not endorse these cognitions, the prevalence of suicide thoughts was comparable to the prevalence in the NCS-R.

The researchers concluded that despite the doubling of mental illness after Hurricane Katrina, these positive cognitions appear to have prevented increased suicidal thoughts, plans, and attempts. However, they also concluded that because the positive cognitions were tied to expectations about a better future, the results might only be a temporary reprieve.

Kessler notes that although previous studies have suggested a connection between positive cognitions and lowered suicidality, this is the first study that offers quantitative evidence of these psychological processes in a sample of disaster victims.

Kessler and his team believe that their findings suggest a systematic investigation of positive cognitions might be useful in guiding public health mass media efforts in the aftermath of future disasters, given that previous research has shown that public health messages play an important role in psychological reactions to disasters.

"The immediate take-home message for disaster recovery and policy makers is that communications with survivors can sometimes build on the temporary reprieve from suicidal tendencies afforded by these protective cognitions. Efforts on the part of public officials to control expectations as practical recovery moves forward without destroying the positive cognitions related to these expectations could prove crucial in the process of continued psychological recovery," says Kessler.

*Adapted from materials provided by [Harvard Medical School](#).*