

Final Katrina Death Toll at 4,081

By Robert Lindsay

I received a lot of criticism for this piece, but this is still probably the best death toll for direct and indirect deaths for Hurricane Katrina out there.

I used my own total of 1,723 direct deaths combined with testimony about a study done after the hurricane that showed a huge increase in excess deaths in the period after the hurricane was over. The resulting total of 4,081 is probably the most accurate total for direct and indirect deaths from the storm so far, unless someone has added some more indirect deaths. This figure came under some criticism, but it is based on the solid epidemiological theory of excess mortality.

The [official death toll of 1,723](#), representing deaths due to immediate and direct effects of the storm, has not changed since August 22, 2006. However, in March 2007, a fascinating document appeared from testimony delivered to Congress, which has caused me to raise the total deaths from Katrina due to direct and immediate plus delayed effects to 4,081.

For those who are interested, a list of 1,195 people who were killed in the hurricane is available [here](#).

The testimony was part of a hearing titled Post Katrina Health Care: Continuing Concerns and Immediate Needs in the New Orleans Region given before the House of Representatives Committee on Energy and Commerce Subcommittee on Oversight and Investigations on March 13, 2007.

The list of speakers is [here](#). Of particular interest in terms of the Katrina death toll was the testimony given by a physician, Dr. Kevin Stephens, Sr., Director of the New Orleans Health Department.

In his [testimony \(pdf\)](#), Stephens points out that New Orleans already had serious public health problems before the hurricane, including large numbers of poor and uninsured people. The number of doctors has been reduced by 70%, and the number of hospital beds in Orleans Parish has been reduced by 75%.

In some areas such as the Lower Ninth Ward and New Orleans East in Orleans Parish and Chalmette and other places in St. Bernard Parish, residents have no access to health care whatsoever. Mental health is another serious problem: even last year, 20% of residents reported suffering from severe stress and depression.

Yet the number of mental health inpatient beds has been reduced by 83%, and the number of psychiatrists has dropped by 90%.

Residents reported observing a larger than usual number of death notices in the newspaper, even long after Katrina and all the way into 2006. At the same time, even months after the storm, residents reported going to more funerals than they ever had.

These anecdotal reports caused Stephens and a team to undertake a study to count the number of death notices in the *New Orleans Times-Picayune* and compare it to a reference year that would serve as a baseline. 2003 was chosen as a reference year. The data can be seen on page nine of the testimony linked above.

In the first six months of 2003, 5,544 deaths were counted. In the first six months of 2006, 7,902 were counted, an increase of 2,358 deaths over baseline in the post-Katrina period. Based on this, we will assign 2,358 deaths as caused by the accelerated death rates that occurred in New Orleans even long after the storm.

Although the population of New Orleans is only 1/2 what it was prior to the storm, the obituaries covered not only New Orleans but also included many of the refugees tossed about to various parts of the country.

Based on this new information, we can add the previous toll of 1,723 to the new post-Katrina figure of 2,358 to posit a new unofficial death toll of 4,081. Possible causes of the excess deaths in 2006 include stress, suicide, pollution, contamination, impoverishment and the devastation of the health sector after Katrina. For instance, the suicide rate [tripled](#) in the first 10 months after Katrina.

Thanks to Ezra Boyd of Louisiana State University for sending me this information.

[Louisiana 2006](#)¹: Tue., Mar. 13, 2007: 2,358

[Louisiana](#): Mon., Aug. 2, 2006: 1,464

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|---|----------------------|-------|
| Mississippi : | Tue., Jan. 24, 2006: | 238 |
| Florida : | Mon., Jan. 9, 2006: | 14 |
| Georgia : | Mon., Jan. 9, 2006: | 2 |
| Alabama : | Mon., Jan. 9, 2006: | 2 |
| Ohio ² : | Wed., Aug. 31, 2005: | 2 |
| Kentucky ³ : | Wed., Aug. 31, 2005: | 1 |
| Total: | | 4,081 |

Footnoted totals are controversial. Explanations for controversial totals follow:

¹ The explanation for the 2,358 excess deaths in the first six months of 2006 as compared to the baseline of the first six months of 2003, presumably due to various effects of Hurricane Katrina, is above. This total reflects deaths due to delayed effects, whereas the other figures all represent more immediate and direct effects of the storm.

² The two Ohio victims are Cassondra Ground, 19, of Monroeville, Ohio, and Thelma Niedzinski, 84, of Norwalk, Ohio. Both were killed in a car accident near Monroeville, Ohio on August 30, 2005. The Ohio State Highway Patrol felt that a wet road caused by Hurricane Katrina caused the car accident. See Ohioans Focus on Helping Katrina Victims, Jay Cohen, *Associated Press*, August 31, 2005.

³ The Kentucky victim was Deanna Petsch, 10, of Hopkinsville, Kentucky. On August 29, 2005, she fell into a Hurricane Katrina-swollen ditch in Hopkinsville and drowned. See Storm Surge: State Gets Soaked, City Avoids Major Flooding, Homes, Life Lost in Hopkinsville, Sheldon S. Shafer and James Malone, *The Louisville (Kentucky) Courier-Journal*, August 31, 2005.

Critics of this piece ask how the 2,368 excess deaths after Katrina can possibly be attributed to Hurricane Katrina. Answer: They cannot.

But using that number is perfectly in accord with the Theory of Excess Mortality. That theory is widely used by epidemiologists and was used by [Les Roberts' team](#) to come up with the figure of 655,000 excess deaths in Iraq since the US invasion.

[Dr. Gideon Polya](#) has done a lot of work in the area of excess mortality and avoidable mortality, some of which has been published in peer-reviewed journals. Examples of his work are [here](#), [here](#), and [here](#).

Can we prove that anything in particular is causing excess mortality in any particular place, absent disaster or war? No. But **something** is killing people in various places at various times at an excessive rate. Anecdotal evidence indicated that many more people than normal were dying in New Orleans in the three to nine months post-Hurricane Katrina. Something was killing them.

They didn't just decide that 2006 was a nice year for dying. Barring other reasonable factors, we may assume that Hurricane Katrina had something to do with the excess deaths in New Orleans. The theory and methodology used in my Katrina excess deaths post is no less rigorous than that used by Roberts, Polya and epidemiologists everywhere.