Reviewer's report

Title: Does place of residence affect risk of suicide? A spatial epidemiologic investigation in Kentucky from 1999 to 2008

Version: 1 Date: 4 December 2011

Reviewer: Andrew Haddow

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To the Authors:

“A spatial epidemiologic investigation in Kentucky from 1999 to 2008” by Saman et al. is well written, the methodology employed is appropriate, and the limitations are stated. The spatial distribution of suicide in the United States has received little attention and is important to determine hot-spots in an effort to target prevention efforts. There are a few minor revisions noted below.

Minor Essential Revisions:

Line 110. “La Cross” should be “La Crosse”

Lines 343-346. “However, according to Dr. Sabrina Walsh, DrPH, MPH, unpublished data from the Kentucky Violent Death Reporting System (KVDRS) suggests that county-level unemployment is statistically associated with higher rates of suicide (oral communication, August 2011).”

This sentence should be revised. This is somewhat speculative without presenting the data in the manuscript. Also, “is statistically associated” should be changed to “may be statistically associated” unless you have tested for statistical significance. Additionally, Dr. Walsh is an author on the manuscript. Therefore, you should just say something to the effect that: “Data collected from the Kentucky Violent Death Reporting System (From??? To When???) suggest that county-level unemployment may be statistically associated with higher rates of suicide (S.W. unpublished data).”

Line 427, Reference 7. Change “apatial” to “spatial”

Discretionary revisions:

Figure 1. Move the box “Excluded 147 cases where county death was unknown” slightly to the right so it is in line with the box above containing “Excluded 153 cases where underlying cause of death was suicide (ICD 10; X60-X74, Y87.0) but manner was homicide” Make the box containing “5237 Suicide cases included in the study” smaller. There is a lot of wasted space otherwise.

The inclusion of the following information would strengthen the manuscript:
Concerning suicide, were the clusters located in rural/urban areas, socioeconomically disadvantaged areas, areas with high unemployment during
the study period when compared to areas outside of the clusters?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests