Reviewer's report

Title: Epidemiological review of the risk factors of measles outbreaks in displaced populations

Version: 1 Date: 1 July 2009

Reviewer: William Moss

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The authors conducted a review of the published literature on measles outbreaks in displaced populations and summarize risk factors for measles and measles mortality, as well as the outbreak responses, from eleven outbreaks described in nine published papers. Historically, measles has been a major cause of child mortality among refugees and internally-displaced populations and information on outbreaks in these populations can assist planning. However, the conclusions of the review are well known, i.e. the importance of early detection and rapid response to measles outbreaks.

Major Compulsory Revisions

1. Although the authors state that they conducted a “systematic review”, it is not clear from the description of the methods that the authors followed all of the guidelines for a systematic review. More details should be provided to convince the reader that the authors followed the guidelines for a systematic review. The time period covered for the search is not stated.

2. The authors do not account for the progress that has been made in reducing measles incidence and mortality in recent years, particularly in sub-Saharan Africa. This progress has implications for measles mortality in displaced populations. In their analysis, the authors could highlight changes in measles incidence and mortality over time in displaced populations and how this might be related to larger efforts in accelerated measles control.

3. The authors should discuss the potential impact of publication bias on their findings. Many organizations involved in managing measles outbreaks among displaced populations do not set a high priority on publishing their observations and much of this experience probably exists only in the “grey”literature, thus, increasing the likelihood of publication bias toward severe or unusual outbreaks.

Minor Essential Revisions

1. The statistics on the estimated number of measles deaths in 2000 as presented in the Background is old data. The authors should provide the most recent WHO estimates.

2. The acronym IMCI does not include “Implementation of”.

Discretionary Revisions
1. The number of tables could be reduced by combining and condensing some of the information.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**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.