

# Cost Effectiveness Analysis of Disaster Medicine Research Planning in Taiwan

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摘要

## Abstract

Since 921 Chi-Chi earthquake, our country has been engaged in the research concerning disaster mitigation and response. National Science Council and other academia institutes such as Science Research Center in Department of Health have also done their best in the related works. All of the efforts have made the advances in disaster response system. However, the cost-effectiveness of the previous disaster research is still not evaluated. Because of the essential roles of disaster planning, we have to avoid the “paper plan syndrome”. It is thus important to make a complete cost-effectiveness evaluation for the overall disaster scientific technique researches. We have been engaged in the related work in the past year and collected many invaluable information and data. In summary, we’d like to evaluate the impact on disaster response and cost-effectiveness of disaster research plans. The cost-effectiveness analysis is as follows. There is 25.6% mortality decrease related to the disaster compared to that of 1995-1999. For each 1% decrease in mortality, the short-term average costs are overall AFC 1.53 million NTD, AVC 8.04 million NTD; and AC 9.57 million NTD. The costs for disaster medicine planning (n=46): AFC 0.14 million NTD, AVC 0.68 million NTD; and AC 0.82 million NTD, whereas those for non-disaster medicine planning (n=46): AFC 1.39 million NTD, AVC 8.84 million NTD; and AC 1.02 million NTD. In addition, there is 9.6% decrease in properties damages related to the disaster compared to that of 1995-1999. For each 1% decrease in losses, the short-term average costs are overall AFC 4.04 million NTD, AVC 21.46 million NTD; and AC 25.55 million NTD. For disaster medicine planning (n=46), AFC is 0.38 million NTD, AVC 1.82 million NTD; and AC 2.20 million NTD. And for non-disaster medicine planning (n=46), AFC is 3.70 million NTD, AVC 2.36 million NTD; and AC 2.73 million NTD. In conclusion, the cost-effectiveness is favorable for disaster medicine research planning in Taiwan.