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What constitutes a global baseline for worldwide casualties from catastrophes?

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What constitutes a global baseline for worldwide casualties from catastrophes?

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Abstract

On March 2015, the United Nations Sendai Framework for International Disaster Risk Reduction was agreed by 187 countries. The first goal of the framework is to substantially reduce global disaster mortality by 2030 (per 100,000). In order to measure this reduction the Framework proposes ‘to lower the average global mortality rate in the decade 2020-2030 compared to the period 2005-2015’ (UNISDR, 2015). However, is the 2005-2015 decade an adequate representative sample of the mean rate of current disaster casualties? This paper sets out to explore what constitutes a representative baseline of disaster mortality in 2015, and how this compares to the mortality actually sampled over the period 2005-2014 (treated as the reference decade for the purposes of this study). Normalised for global population, adjusted for the greater than average incidence of high casualty catastrophes in the post 2005 period, and taking into consideration assessed improvements in disaster warnings and evacuations, casualties in the 2005-2014 period were found to lie between the 65th and 83rd percentile of expected disaster casualties. Therefore, if nothing changed around further improvements in disaster mitigation, another decade of data (e.g 2020- 2029) has between a 65% and 83% chance of being lower than the 2005-2014 decade. The most appropriate 2015 global baseline from which to set the Sendai target of ‘substantial reduction’ is found to be between 6.30-8.70 disaster fatalities per 100,000 of the population (as compared with 9.72 fatalities per 100,000 in the actual 2005-2014 period).

Keywords: Sendai Framework; Global Baseline; Disaster mortality

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