



Flash floods casualties in south of France: from « passive » to « active » connotation of vulnerability.

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With more than 150 victims in the past twenty years, mediterranean flash floods appear as the most threatening natural hazard in France. So, in purpose of reducing the number of victims by improving prevention, a good knowledge of human vulnerability is necessary.

This contribution presents an accurate analysis of mortality in the south of France from 1988 to 2008 in regions exposed to « cevenoles floods » (i.e. the Languedoc-Roussillon region, Ardèche, Drôme, Vaucluse et Bouches-du-Rhône).

Human vulnerability is analysed according to the detailed characteristics of victims (age, gender, origin), the exact location and the circumstances of decease. First, it introduces statistics on the characteristics of victims which offers keys to improve emergency management. It's possible to adapt the warning system by targeting the people exposed to flood's effects. Secondly, it shows that displacements in vehicle appear as the first circumstance of death (almost half of the cases). One of the reasons is that there is a lot of dangerous behaviours which are fatal to the victims. Indeed, numerous cases of fatalities are due to the lack of awareness (mainly because people lessen danger and believe they are invulnerable) which means crossing hazardous roads prone to flooding and notably according to the type of used vehicle. But people also expose themselves to death ("dwelling death") by refusing to evacuate their homes. So, the main victims of floods are not the most vulnerable ones but those who are taking more risk through their behaviors. Those results show the shift from a so-called "passive connotation of vulnerability" (and a passive connotation of the victim) to a "responsible" vulnerability (which is an active connotation of the victim).

Finally, this contribution focuses on the perspectives of prevention and wonder what can be the number of unavoidable losses of human lives, caused by uncontrollable individual behavior.