



The challenge of Risk Communication: an Australian perspective

Valentina Koschatzky, Katharine Haynes , and John McAneney
Risk Frontiers, Macquarie University, NSW 2109, Australia

Last October, in a landmark case, six scientists and a government official associated with the Italian National Commission for the Forecast and Prevention of Major Risks were found guilty of multiple counts of manslaughter. The trial followed a magnitude 6.3 earthquake near the Italian city of L'Aquila that killed 309 people in April 2009. The alleged crime was not a failure to predict the earthquake, but rather one of inadequately communicating the level of risk, and, presumably in the view of the judge, deliberate obfuscation.

Risk communication is about providing the public with information needed to minimise injury, loss of life and damage to property. Mostly, even when well executed, this is, at best, only partially successful. The usual outcome is a public who, despite warnings and for any number of reasons, do not undertake protective behaviour. Nevertheless, despite the difficulty of motivating behavioural change, the public deserve correct and objective information. The L'Aquila situation is not without precedent: on June 25, 1997, a major dome collapse of the Soufrière Hills Volcano on the Caribbean Island of Montserrat killed 19 people within a designated exclusion zone. At the inquest, the advice provided by the scientists involved with the monitoring and risk assessment of the volcano was closely scrutinised. In the end, however, the scientists were not implicated in the deaths and the advice they provided was not challenged. The scientists on Montserrat, like those of the Major Risk Commission in Italy, had come under great pressure to bend their science to the social and political needs of the island; unlike the scientists on trial in Italy, they resisted.

Similar questions were posed of fire authorities and scientists after the 2009 bushfires (wildfires) in Victoria, Australia, and the death of 173 people. A longstanding Australian bushfire community safety strategy was the 'prepare, stay and defend [homes], or leave early policy'. It arose from evidence that the majority of past bushfire fatalities had occurred while people were fleeing from homes that if defended would have provided safe refuge. In 2009, however, this strategy was interpreted too lightly or misinterpreted by many who died defending poorly prepared homes too close to bushlands. Afterwards the evidence that gave rise to this policy and its communication were investigated in a Royal Commission. Two of this paper's authors appeared as expert witnesses and their science tested publicly.

This work will examine the role of scientists and scientific advice in respect to the tragedies of L'Aquila, Montserrat and the authors' own experience with Australian bushfires. A primary consideration in communicating risk is clear separation between the roles of scientists and authorities responsible for civil protection. During times of high stress and uncertainty, these roles can become blurred as government officials find it difficult to make unpopular decisions and may wish to blame poor outcomes on scientists and emergency managers. It should be noted, however, that scientists are not, by virtue of their career choice, exempted from the same standards of responsibility demanded of other professional groups.