2. Methodological Issues

The data I shall present today is going to be all from the category of direct (or 1st order) costs, which avoids the methodological difficulties associated with comparing costs over time and space. For example, Hurricane Andrew (South Florida 1992) totalled US$30 billion in damage for direct costs; slightly over half of this was composed of insurance payments, and a sizable chunk (between US$10-12 billion) was composed of federal, state and local government payments.

We confront a methodological problem when dealing with human impact (loss of life). In an audience participation exercise, we may consider examples of loss of life, based on real events obtained from the U.S. National Association of Medical Examiners Meeting. We have a choice of four different reasons, from the following list, as to whether a given weather event was a direct cause of the death of the described individuals: (a) yes, directly; (b) yes, indirectly; (c) possibly; (d) no. The results of such audience surveys reflect those of the experts themselves; there is no consensus on the nature of a disaster-caused death. It should also be noted that, according to the social science literature, there is a marked increase in the number of suicides and incidents of domestic violence after weather disasters. In the Chicago heat wave of 1995, many elderly people lost their lives (either by stroke or heart attack), and yet it is difficult to define a quantitative criterion for a cause of death. Such criteria, if they exist at all, are determined differently in different places, with correspondingly different findings. This methodological exercise is supposed to point out that when you are looking at economics and loss of life aspects of natural disasters, you should be very sceptical of your data. I recommend the Sherlock Holmes approach: take all the data and see in which direction they are pointing, and do not rely too heavily on any one bit of information.