In most real life situations we are not only confronted with one single source of risk or one single risk, but with several sources of risk or combinations of risks. An important question is whether individual risks influence each other or not. This may concern the time of their occurrence and/or their severity. In other words, we need to understand how to model and describe the dependence structure of risks. Clearly, if risks influence each other in such a way that they tend to occur together and increase the severity of the overall risk, then the situation may be much more dangerous than otherwise. We illustrate this with a concrete example. Consider a building which could be hit by an earthquake and a flood. If the building is situated on the Japanese coast, an earthquake may damage the building and cause a tsunami, which in turn floods the building. Hence, it is quite likely that by these two combined sources of risk a particularly disastrous event occurs. In other words, there is a strong positive dependence between these two risks (high damage from an earthquake will often come along with high damage from a flood). This does not mean that they always occur together, since an earthquake does not necessarily cause a tsunami or there may be a flood only due to heavy rain.