

## Hand out - what is risk and how is it linked to health crisis communication?

**Resource:** Crisis and Emergency risk communication model

**Objective:** The concept of risk plays a critical role in health crisis communication. This hand out aims to provide the basis for a thorough understanding of the concept of risk itself, health risk assessment and how risk relates to health crisis communication.

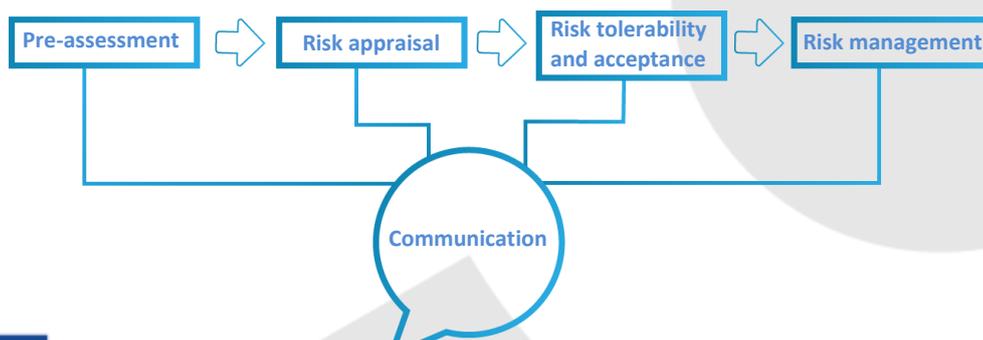
### Background

Citizen health safety is one of the cornerstone concerns for all European governments. Decisions must be made regarding which situations can be considered safe and beneficial for our society and which should be considered a risk to our wellbeing. Such decisions are linked to weighing risks and benefits. This is also the case with health related issues and related communication activities.

In a broad sense, risk can be defined as the possibility of adverse effects from some action or event with respect to something that humans value (Renn 1992). It contains two key elements usually associated with risk assessment: the likelihood or chance of potential harm actually becoming a reality and the severity (the consequences) of this harmful event. In terms of health risk, this can refer to the likelihood of an epidemic flu becoming a pandemic one and the consequences this may have on the elderly population.

The risk related decisions reflect the fundamental question of how do we make decisions in the first place: “What questions do we need to ask?”, “How broad should the discussion be?” and “Do we weigh enough risks and benefits?” are some of the questions we need to address in our dialogue. In the case of health crisis situations, the basic challenge is to decide when we know enough to act or not to act regarding a potential risk. How and what we decide in such uncertain situations could have far reaching implications on our lives. So risk management is a concept for dealing with real or potential risks.

It is under the conditions of a potential risk that precautionary actions could be taken. It is used when validation of the risk is difficult to obtain. This precautionary principle has become one of the cornerstones of the decision making process in the EU. Europe has pioneered the use of the precautionary principle: that is, to take decisions in light of scientific uncertainty. In such situations, the health risk managers, including those involved in health crisis communication, need to take actions that place citizens’ safety first.



## Risk governance - dealing with health risk issues

Risk governance is traditionally divided into three parts: risk assessment (gaining knowledge about the risk in question) risk management (actions on the part of risk managers to prevent, reduce, eliminate or alter the risk impact) and risk communication (facilitating the dialogue between the key stakeholders). In the current understanding of Risk governance, risk communication is the key link between the different components of risk assessment and risk management (Renn et al 2005). It is evident from this outline that health crisis governance can be considered as part of risk governance: as in risk governance, health crisis governance follows similar evaluation phases. Moreover, risk and health crisis communication have similar governance roles (for more on health crisis communication please see lessons 1 to 3). Whether or not, to what extent and how successfully we deal with the risks will depend on how we classify the risks and on the complexity of the risk that will determine the likelihood and impact of the harmful event.

## Classification of risks

Based on psychometric studies, a new concept for classifying risk perceptions has emerged, which is referred to as “semantic risk patterns”, where five patterns can be described (Renn et al 2005).

- Pattern 1: Risks posing an immediate threat (e.g. nuclear energy or large dams)
- Pattern 2: Risks being understood as a blow of fate (e.g. natural disasters)
- Pattern 3: Risks presenting a challenge to one’s own strength (e.g. risky sports activities like free climbing)
- Pattern 4: Risks as a gamble (e.g. lotteries, stock exchange or insurances)
- Pattern 5: Risks as an early indication of insidious danger (e.g. food additives, ionising radiation, viruses)

These semantic patterns help individuals to deal with new situations by associating them to similar and therefore known patterns. As an example, flu pandemic would be subsumed under the pattern - risk posing an immediate threat, with a high level of risk and a low level of tolerability and acceptance on the part of the society at large.

## Risk complexities

There are many different health risks, each requiring a specific response strategy. The strategy will depend on the type and complexity of the risk being faced. The risks can belong to different categories. These are: simple, complex, uncertain and ambiguous.

- In simple risks, the consequences of the risks are clearly defined with low or no uncertainty. Smoking is an example of a simple risk.
- In complex risks, the decision maker needs to deal with a mixture of different factors with insufficient knowledge about the influence of the individual factors on the ultimate outcome of the situation. Water pollution is an example of a complex health risk.
- In uncertain risks, the situations are characterized by high levels of uncertainty about the severity of the impact and the probability of the event taking place. Earthquakes are a good example of an uncertain risk.
- In ambiguous risks, decisions are characterized by the discussions that go beyond the risk impacts themselves. A good example is the potential risks associated with genetically modified food or pandemics.

In conclusion, there are different types and complexities of risks that need to be evaluated. When discussing health risks, especially those related to virus based epidemics and crises, they belong to pattern 1 and 5 and to complex and ambiguous risks. As such they need to be dealt with in a participative discourse where all the stakeholders need to be involved in the communication process. This includes for example the health authorities, media and the public. The challenges would need to be resolved using risk-benefit analysis and risk modelling.