



## **Self-Protection with Children in the Community**

### **STATE OF THE ART**

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**French Red Cross**

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**Belgian Red Cross**

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## Introduction

The general aim of the project “Self-Protection with Children in the Community” is to prepare children between the ages of 8 and 11 years old to face risks.

We have an original approach based on 4 elements:

- To reinforce the links within the community and the transgenerational links between the younger generation and the elders.
- To take into account the specific needs of children for protection depending on their cognitive and emotional development.
- To take into account the risks in a global way and not to focus on a specific risk.
- To avoid fear-appeal messages and on the contrary to favour positive messages as reinforcing the links within the community.

In this document, we reviewed the information available in the literature and reports in order to confirm our hypothesis.

The first chapter of this document deals with the information gathered in the literature about community preparedness and the different existing models of community resilience; in particular the factor leading individuals to prepare themselves and children’s preparedness.

Some elements are given about the negative impacts of the fear-appeal messages in risk communication and the importance of involving parents in the children preparedness programmes has been highlighted.

The key element of this project is to integrate the adults of the community in the children’s preparedness. It is important that the parents, teachers, elderly persons, all those adults who are directly related to the children should take back their part in educating the children, which has been usurped by the mass media campaigns on risk related issues.

Transgenerational bonds between the youngest and oldest citizens are actively supported. It is vital that the elders of the community should hand down the memories of the community towards providing useful information for preparedness and to forge new links for members of the community.

The second chapter of this document deals with the specificity of the children. Information from literature has been gathered on topics such as: children’s behaviour in risk situation, social family risk educational practices and children’s protection within the community.

Literature highlights the need of children to be protected because of the emotional impact of emergency situations. Very often children have to handle huge responsibilities during a disaster or in risk preparedness. A lot is expected of them without taking into account their emotional reactions and needs when faced with disasters.

The cognitive and emotional development of children has to be taken into account before setting unachievable goals in terms of preparedness.

Depending on their age, children won't have the same risk perception, the same abilities to face the risks and the same needs.

The question asked by this project is "How can children participate in self-protection of their community and being protected by the adults at the same time?".

We believe that the educational practices of the adults have to be empowered in order to help them to get in touch with the emotional and developmental capacities of the children and simultaneously links between the different members of the community have to be reinforced. The objective is thus to reinforce the confidence of the adults in their capacity to protect children.

In the objective to develop pedagogical tools to prepare children for risks, a research has been conducted on the existing pedagogical tools.

In many of the already existing tools aimed at developing children's know-how to face disaster, very few of them consider children as being part of a community.

The transmission of know-how to children is necessary, but the reinforcement of the links within the community is essential. Basically if children trust the adults of their community and if they know that they can rely on them in daily life, during a disaster they will know that they can be protected by the adults. They will certainly cope better with the situation and will be more able to use their skills; this is why the reinforcement of the links within the community and the involvement of the adults in the programmes are so important.

No tools currently focus on this aspect that adults should be helped to protect children, and to reinforce both the interactions between children and adults, and also the interactions of the community and the sense of belonging.

# Preparedness within the community

## I. Definitions of community resilience

Community resilience:

- Is a process linking a network of adaptative capacities (resources with dynamic attributes) to adapt after a disturbance or adversity. Community adaptation is manifest on population wellness, defined as high and non-disparate levels of mental and behavioural health, functioning, and quality of life (Norris, 2008).
- Is an “adaptative capacity”. Society’s capability to draw on its individual, collective and institutional resources and competence to cope with, adapt to, and develop from the demands, challenges and changes encountered before, during and after a disaster according to Paton (Daly, 2009).
- The ability of people and communities to survive, adapt to, and recover from loss and disruption according to Manyera and Paton (Peek, 2009). A capacity to adapt can be summarised as comprising two elements. One concerns the existence of the resources required to facilitate coping with the disruptions and loss associated with hazard activity. This makes preparation, the process by which resource availability is encouraged, an important component of resilience. The second component concerns the systems and competencies required by people and communities to co-ordinate and utilise these resources to confront challenging circumstances and to adapt or adjust to the consequences of hazard activity.
- Is a process- a positive trajectory of adaptation after disturbance, stress, or adversity- Community resilience emerges from four primary sets of adaptative capacities (Norris, 2007):
  - o -Economic development
  - o -Social capital
  - o -Information and communication
  - o -Community competence
- Is the capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its

capacity for learning from past disasters for better future protection and to improve risk reduction measures (Subcommittee on Disaster Reduction, 2005).

- Is a community or region's capability to prepare for, respond to, and recover from significant disturbance-driven changes: while maintaining community character, cohesion and capacity, and without permanent impairment of the community's public safety and health, economic, social, and national security functions, thus, accelerating recovery (SERRI).
- Is the amount of disturbance a system can absorb and still remain within the same state, the degree to which the system is capable of self-organization, the degree to which the system can build and increase the capacity for learning and adaptation (Klein, Nicholls and Thomalla 2003).
- Community seismic resilience is defined as the ability of social units to mitigate hazards, contain the effects of disasters when they occur, and carry out recovery activities in ways that minimize social disruption and mitigate the effects of future earthquakes (Bruneau et al. 2003).
- Social resilience is the ability of groups or communities to cope with external stresses and disturbances as a result of social, political, and environmental change. It's the ability of communities to withstand external shocks to their social infrastructure (Adger, 2000).

## **II. Resilience components**

According to Paton (Daly, 2009), the components of community resilience are the following:

- Communities, their members, business and institutions must have the resources required to deal with their safety and continuity of core services after a disaster (household emergency plan, business continuity plan...)
- Communities, their members, business and institutions must have the competence and procedures required to organize and use these resources to deal with the problems encountered and adapt the reality created by a disaster (problem solving ability, community cohesiveness, training staff, devolved decision making).
- The planning and development used to facilitate resilience must be designed to integrate the resources available and to ensure opportunities for change and growth are capitalised on.
- Mechanisms must be in place to ensure the sustained availability of these resources and the competence required to use them over time and against a

background of hazard quiescence and changing community membership, needs, goals and functions.

### **III. Community resilience models**

The resilience model of Paton (Daly, 2009) draws together the components described and is based on a number of indicators, and the interaction between them.

The most relevant indicators are:

- Personal, where people need to know that the small things they do can make a positive difference for themselves, their families and their neighbours (outcome expectancy and action coping).
- Community, where people actually participate in their communities to identify and discuss their issues and risks and determine collective solutions (community participation and problem articulation).
- Institutional, where communities are supported by civic agencies that encourage and empower community-lead initiatives and where mutual trust and respect exist (empowerment and trust).

The model of Paton is derived from the premise that a decision to act reflects how people interpret information to make it meaningful to them. The model describes how interactions between a person, community and societal characteristics influence people's capacity to adapt to hazard consequences (Paton 2008).

According to Paton strategies to manage risks can be divided in two categories:

- Managing the risks to the physical and built environment
- From recognition that hazards have an impact on people that is independent of their effect on the natural and built environment and is directed towards facilitating individual and collective changes in behaviour and increasing their capacity to adapt to adverse circumstances.

People's understanding of, and response to risk is determined not only by scientific information about risk, but also by the manner in which this information interacts with psychological, social, cultural, institutional and political processes to influence outcome.

Hazard consequences reflect the interaction between hazard characteristics and the individual and community elements that increase susceptibility to experiencing loss from exposure to a hazard situation (increase vulnerability) and thereby facilitate a capacity to adapt or adjust (increase resilience).

He points out the need to manage these resilience and vulnerability processes rather than risk per se.

But the management of vulnerability factors will not contribute to the development of adaptive capacity directly. Consequently, it is important to include strategies designed specifically to enhance adaptive capacity in risk management.

Vulnerability factors:

Individual factors:

- Personality (neuroticism)
- Denial based coping
- Learned helplessness
- Developmental immaturity

Group factors

- Demographic (age, ethnic minority status, educational level)
- Environmental (economic resource limitation, marginalised political and economical status, family dynamics, limited social network access)

The choice that can be made about vulnerability and resilience factors management should be regarded as community based process because how communities and their members experience depends on their social, psychological, cultural and institutional characteristics.

Preparedness and the co-ordination and use of resources are two parts of the adaptive capability.

Progression from the impact to the response phase provides greater necessity and opportunity for people to work with neighbours and offer community members to confront local demands. Adaptive capacity will be defined in terms of the capacity of community members to work with others to plan and execute tasks. The existence of mechanisms to mobilise community members to deal with challenges and threats will enhance this capacity. The adaptive capacity is the integration of personal (e.g. self efficacy, sense of belonging), community (e.g. social support, collective efficacy) and institutional (e.g. business continuity planning) levels and includes the process required to bind them together (e.g. social justice, community competence, trust, empowerment).

The factors which facilitate the development and sustained existence of this collective capacity are:

- Equity and fairness regarding the distribution of risks throughout different sectors of the community.
- Community involvement in decision making about acceptable levels of risks and the strategies used to mitigate this risk.
- Strategies based on social justice principles.

The construct of “community competence” describes a community with regard to, for example, participation and commitment to community issues and inclusion of

members in salient decisions, capacity to articulate collective views, and procedure for managing relations with the wider society. The effectiveness of adaptative capacity will be the function of the degree of civic reciprocity. That is the degree to which civic agencies distribute power, resources and expertise in ways that empower community members and the degree to which community capacity is sustained by institutional practices and procedures.

According to Weick (1993), we can identify four principles, tenets or features that would seem to be necessary to allow for effective responses in rapidly changing. When in place, these principles facilitate the collective "sense making" that is required for a group to comprehend and respond to crisis or change. These principles are:

"Bricolage", which is the capacity to improvise, to apply creativity.

"Virtual role systems" that allow to preserve intact in each person's mind a conception of the system of which they are a part. Even in situations of peril and disruption, everyone is able to maintain a shared vision of risks, goals and possible actions.

"Wisdom" is the capacity to question what is known, to appreciate the limits of knowledge; and to seek new information.

"Respectful interaction" consists of respecting the reports of others and being willing to act on them, reporting honestly to others, and respecting one's own perceptions and trying to integrate them with others.

According to Mallak (1998), who applied Weick's conception of resilience to hospital settings, six tenets can be identified to allow resilience behaviours:

Goal-directed solution seeking: "goals and a vision to guide creative processes in seeking solutions to problems". This factor is thus comparable to bricolage.

Avoidance includes "approaching new situations with scepticism. Mallak notes that this is related to wisdom.

Critical understanding is "the effective use of information to make sense of the situation when chaos ensues".

Role dependence is "the ability to fill in for a missing team member. Mallak associates role dependence with Weick's virtual role systems.

Multiple source reliance is the use of multiple sources of information to develop a coherent understanding of changing conditions.

Resource access is the use of tools or supplies as needed, even without securing permission each time.

Mallak reiterates the importance of bricolage and virtual role systems. But his conception of resilience focuses on individual characteristics rather than on organizations. For example, Mallak notes the importance of "self-efficacy" among resilient people. He defines self-efficacy as "the confidence in his or her ability to perform a specific task in a particular situation. This is the cognitive side of resilience, in resilience we are concerned not only with a person's confidence and belief in his or her abilities, but with their actual execution of those abilities directed toward a specific problem".

Horne and Orr (1998) identified seven “streams of resilient behaviour”, which are generally analogous to those described by Weick and his associates:

- Community: the sense of shared organizational purpose
- Competence: appropriate knowledge and skills
- Connections: the relationships or linkages between the units of the organization
- Commitment: maintaining goodwill during times of uncertainty
- Communication: the sharing of information
- Co-ordination: synchronizing change
- Consideration: “understanding by organizational leadership that change surrounds and interweaves into people’s lives such that small shifts in organizational activity may be perceived as ‘overload’ ”.

Citizens are expected to work together to face local demands particularly during the response phase. The community is thus considered as people sharing the same environment. The notion of local level for risk preparedness is important, but the social support networks should be emphasized before a disaster in order to enable trust in the community in case of disaster.

#### **IV. Hurdles for community resilience**

Resilience is a new concept for most sectors. Leaders may have heard that resilience is essential to improving outcomes after disaster, but may not know how to achieve it. Resilience may be given a lower priority when compared with other urgent preparedness needs.

Leaders are being inundated with information about preparing for disaster. They are expected to develop and implement disaster plans while meeting their ongoing responsibilities. Sector leaders will need to consider how roles and responsibilities might change in the event of a disaster.

The attitude that a disaster “won’t happen here” can reduce commitment to emergency preparedness planning.

Preparedness planning and disaster drills typically do not include all sectors (business, community, cultural and faith-based organizations, first responders, health care, media, mental health, and schools) and rarely do they include issues unique to children and families. It is a common assumption that “someone else” will be responsible for children’s concerns.

Preparedness planning and disaster drills rarely address mental health issues.

Preparedness planning and services may overlook non-traditional family structure, so that education or outreach efforts do not include grandparent caregivers, foster parents, or group home caregivers.

Partnerships within the community:

- May exist among some, but not all, community sectors.
- May be established, but then disrupted by changes in leadership due to retirement, resignations, or elections.
- May be compromised by the competing policies or political agendas of sectors.
- May develop the ability to work together in the trenches in the aftermath of an event, rather than before an event.
- May collaborate initially, but become competitive after a disaster over such issues as the distribution of resources or recognition for accomplishments.
- May suffer because sectors are willing to share perceived strengths in their disaster preparedness plans, but unwilling to reveal weaknesses, leading to incomplete or inaccurate understanding of plan content or implementation.

Training related to resilience and disaster mental health:

- May seem overwhelming due to competing demands and/or other trainings, including disaster response.
- May be neglected due to financial, staffing, or time constraints.
- May be aimed at mental health providers only, rather than including emotional wellbeing in all sector trainings about disasters.
- May not include information specifically tailored for those in leadership positions.

Sector leaders may have limited understanding about:

- Stress reactions which affect service providers.
- The additional stress on service providers when children are among the victims.
- The necessity of self-care strategies for service providers in disaster.

Sector leaders may find themselves so busy seeing to the responsibilities of their sector and the community that they neglect their own health needs and emotional well-being.

Sector leaders may find that staff who are generally responsible for addressing mental health concerns, such as employee assistance program professionals or school

counsellors, may not be skilled in mental health disaster or may be insufficient in number to respond to the needs of sector members and their families after a disaster.

Sector leaders may find that there is a lack of knowledge about the stigma associated with seeking mental health services.

Some gaps in preparedness planning have been highlighted by the Terrorism Disaster Centre:

- children's concerns are rarely included in preparedness planning
- non traditional family structures are not always taken into account

In other words, the emergency rescue services, even if they act for the whole community are not always able to consider the specific needs of each one.

That's why preparedness programs centred in the community level should reinforce the links between the citizens in order to facilitate the taking into account of specific needs within the community.

## **V. What determines individual preparedness?**

According to Paton the preparedness process will depend on motivation, which is influenced by different predictors.

The first one is the level of perceived threat or risk posed by a hazard.

The perceived risks depend on:

- Interpretive process that reflect the operation of cognitive biases and the social context within which people live.
- By the degree to which people's livelihood is affected more than hazard characteristics per se.
- Unrealistic optimism bias, while people may accept the need for greater preparedness, they perceive it as applying to others but not to themselves.
- The tendency to overestimate the capacity of hazard mitigation strategies (risk compensation).

Overestimating existing knowledge, the effectiveness of mitigation measures or transferring responsibility or attributing the need for preparedness to others will result in people underestimating risk relative to a more objective estimation. Countering these problems involve personalizing hazard information and disseminating it in ways that involve engaging people in debate.

The second motivation is the extent to which people perceive hazard issues as important enough (critical awareness) to think about and discuss with others on a regular basis.

While people may have a positive attitude to natural hazard risk reduction, this does not guarantee that it will translate into support for readiness actions.

Salience could also be influenced by social norms. The judgements people make regarding acting on attitudes is influenced by beliefs regarding how significant others would evaluate them if they were to support or adapt a mitigation measure.

Anxiety related to earthquakes was found to inhibit motivation to prepare.

If hazard issues are salient, if people believe the hazard can adversely affect them, and their level of associated anxiety worries are low, people will progress to the intention formation stage.

The relationship between motivations and intentions is motivated by another set of factors.

Even if motivated, people will not formulate intentions to act if they perceive:

- hazard effects as fundamentally insurmountable (low outcome expectancies)
- do not perceive them as having the competency to act (low self-efficacy)
- or not disposed to confront problems (low action coping)

The use of distressing images in risk communication messages can reinforce people's belief that disasters are too catastrophic for personal action to be effective.

According to Mc Ivor, it is not information per se that determines action, but how people interpret it in the context of their experience, beliefs and expectations. He studied the reasoning process of individuals living in areas affected by natural hazards, specifically the decision making processes engaged in when deciding to prepare against the effects of these hazards. Findings indicate people require hazard information that they perceive as being relevant. This is important as the relevance of information can contribute to levels of trust that people have in civic emergency management agencies. It is only when mutual hazards are perceived as having greater salience than other threats that people are motivated to prepare for their effects.

According to Ronan (2008), it is well known that the public largely does not carry out the self-protective measures recommended by emergency management authorities during non crisis times.

He developed a model explaining why people do or do not prepare for hazards. He highlights the importance of motivation. For him a change in thinking and behaviour can only take place when a person is "willing, able and ready".

First, a person's willingness to change has been linked to their level of emotional investment. When an observable discrepancy between a desirable state of affairs and an individual current status is present, an individual appears to be more willing to consider the value of making change.

The second element necessary to initiate change is the ability factor. It represents an individuals' confidence that the hazard adjustment will be effective (general efficacy) and that they are capable of carrying out the adjustment (self-efficacy).

The third component necessary to initiate change is the readiness factor. This indicates that by itself an acknowledgment of the perceived importance and ability to carry out any given hazard adjustments is not enough; people need to process a sense of urgency or intention, that initiating change now rather than later is in the best interest.

Individual preparedness is influenced by the community level. The individuals are here considered as belonging to a community even if personal dimensions influence their motivation to prepare for hazards.

The findings have implications in preparedness programs which can facilitate some factors like:

- to engage people in debate
- communication strategies

Engaging people in debate enables the possibility to create links between the community and the possibility for each one to find their place according to their capacities. That's why standardized expectations from all citizens in terms of preparedness can't apply.

It has been shown that fear-appeal communication strategies may inhibit motivation to prepare and that it is not scientific information but relevant information for people that determines action.

## **VI. The role of children in community resilience**

### **1. Protective and vulnerability factors for children**

According to Ronan the risk factors of psychological effects of disasters on children are:

- degree of exposure (particularly that involving life threat, injury, loss)
- pre-existing factors (e.g. demographic factors such as younger age, female gender)
- coping style (e.g. avoidant, blaming)
- low perception of social support
- family factors:
  - o parent's reactions to a disaster predict children's reactions
  - o low levels of warmth
  - o inept discipline practice

- increased parent, marital or family conflict
- parental psychopathology
- parental substance abuse
- lack of parental supervision

While distressed parents can increase a child’s vulnerability, a parent who is able to provide warmth, support, consistency, predictability and a “coping model” for their child would be thought to decrease vulnerability.

Peek (2008) gathered a list of factors influencing children’s vulnerability on disaster.

Psychological vulnerability	Physical vulnerability	Educational vulnerability
<ul style="list-style-type: none"> <li>• Life threat</li> <li>• Family separation</li> <li>• Death of a loved one</li> <li>• Material loss</li> <li>• Home/school damage</li> <li>• Direct exposure or media exposure to disaster</li> <li>• Child characteristics (race, age, gender, SES)</li> <li>• Poor functioning pre-disaster</li> <li>• Parental distress</li> <li>• Low levels of social support</li> <li>• Additional life stressors</li> <li>• Negative coping skills</li> <li>• Lack of coping assistance</li> <li>• displacement</li> </ul>	<ul style="list-style-type: none"> <li>• Living in poor communities in hazard-prone regions</li> <li>• Living in/going to school in substandard structures</li> <li>• Loss of a parent</li> <li>• Family separation</li> <li>• Child characteristics (age, gender, SES)</li> <li>• Size, strength, stage of development</li> <li>• Poor diet</li> <li>• Parental distress</li> <li>• Unsafe/unsanitary shelter environment</li> </ul>	<ul style="list-style-type: none"> <li>• Destruction of school buildings</li> <li>• Displacement of students and teachers</li> <li>• Loss of vital records</li> <li>• Delayed enrolment</li> <li>• Multiple school changes</li> <li>• Family instability</li> <li>• Unwelcoming/unsupportive school environments</li> <li>• Poor academic performance pre-disaster</li> <li>• Loss of a parent</li> <li>• Increased work demands</li> </ul>

## 2. Reducing children’s vulnerability through disaster preparedness and response activities

### 2.1. The role of school education programs

Findings of several studies carried by Ronan to highlight specific factors which have particularly active roles in promoting change:

- children who had engaged in a greater number of programs were more likely to have increased benefits
- more recent involvement in an education program was more beneficial (within the past two years). This suggest that the effects of hazards education programs may diminish with time

- increase in children’s hazard-related knowledge has been associated with more realistic risk perception and lower levels of hazard-related fears
- programs with a specific emergency management focus had a significantly greater impact on children’s hazard-related awareness, knowledge and the numbers of hazards-adjustments adopted in the household
- programs that emphasize an increased interaction between children and parents have been found to be associated with family planning and practice and the adoption of an increased number of hazard adjustments.

For Ronan, advantages of programs within school is that certain aspects of programs can lead to increase interaction between youths and families as well, as potentially between youths and families and in the larger community.

However Towers (2008) who carried out a study about bush fire risks found the results showed that until early adolescence, there is a fundamental disconnection between children’s understanding of risk factors and their projection of bushfire consequences. While children can acquire hazard knowledge and discuss hazards, cognitive limitations on the ability to understand how this knowledge relates to causes and prevention actions, creates problems with regard to their sustained engagement in meaningful actions and discussions.

Children’s hazard education will need to facilitate a strengthening of links between children’s models of vulnerability and protection and their models of consequences by ensuring that educational intervention is designed to accommodate the underlying level of cognitive sophistication.

## 2.2. The impact of children preparedness in the community

Ronan’s findings have demonstrated that linking children’s learning and enthusiasm with the family and home preparedness has potential in terms of both physical preparedness and emotional readiness. This link merits, according to him, extension beyond the school-youth-family network through the wider community.

## 3. The participation of children in community resilience

It is highlighted by Peek (2008) that children have considerable strengths that could serve as a significant resource for families, communities, and organizations attempting to prepare for, respond to and recover from disasters.

The author gathered different contributions from children expected through the disaster lifecycle.

Preparedness	Response	Recovery
<ul style="list-style-type: none"> <li>• Disaster drills</li> <li>• Risk mapping</li> <li>• Evacuation planning</li> <li>• Home hazards</li> </ul>	<ul style="list-style-type: none"> <li>• Warning others</li> <li>• Risk communication</li> <li>• Translation of disaster materials</li> </ul>	<ul style="list-style-type: none"> <li>• Effective coping strategies: writing, drawing, taking pictures</li> <li>• Peer counselling</li> </ul>

<p>adjustments</p> <ul style="list-style-type: none"> <li>• Search and rescue training</li> <li>• Risk communication</li> <li>• Formal and informal hazard education</li> </ul>	<ul style="list-style-type: none"> <li>• Evacuation assistance</li> <li>• Physical protection</li> <li>• Search and rescue</li> </ul>	<ul style="list-style-type: none"> <li>• Aid collection/distribution</li> <li>• Planning and rebuilding efforts</li> <li>• Caring for other children</li> <li>• Assisting with household chores</li> <li>• Participating in paid labor</li> </ul>
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Children protection and the expectancies of the community towards their participation in the community preparedness and response:

It is through the preparedness that the expectancy of the community towards children's involvement in community resilience will be defined.

Thus it is important to take into account the children's needs for protection during their preparedness.

That's why it is so important to involve the adults in children preparedness for several reasons:

-To enable adults to take into account the needs of children to be protected and supported and enhance adults' educative practices concerning risks bringing key elements to understand the developmental capacities of children to face risks (risk perception, mental representations, emotional impacts of emergency situations, diagnostic abilities, children's coping strategies).

-Through the reinforcement of community links, to enable children to address the adults of their community in case of emergency and develop their trust in adults and their protection capacities.

The focus on the children's inscription in their family circle will enable the children's inscription in their community developing trust in the adult and experiencing their support.

Some psychoanalysts, child psychiatrists and psychologists (Magot (2006), Marneffe (2006), Lassarre (2006)) have worked on the impact of prevention campaigns on children. Their results have implications in children preparedness. Indeed they show that children are very vulnerable to risks and are not able to cope alone. The main points to take into account are the following:

- The prevention campaigns addressed to children are not the best way to prepare them to cope with the risks. Some campaigns generate anxiety because they place the responsibility on children to insure their own protection. Furthermore, some studies show that children can't change by themselves the behaviours of their parents.

- The adults have to play a role, especially by talking to children. We should think of pedagogical tools helping adults to get in touch with children and to talk about different topics which worry children.
- As risk education has to be given by the adults, they have to be able to cope with the different type of risks. The adults are responsible for children and have to guide them in life; which means some risk education should be given also to the parents when necessary because children will feel safe if their parents have the possibility to overcome their own fears. A study from New Zealand (Ronan, 2001) shows that if hazard-related communication from adults is perceived as having an element of anxiety, children may be more likely to experience anxiety as well.

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# Children at risk, towards the community response. Educational information within the community.

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## I. Risk, Children and the Community

Risks for children immediately engage and concern society as a whole. Daily life as well as emergency situations are full of risks, which are multiple, potentially critical and highly probable, especially for children. Above all the specific characteristics of each case (in daily life and emergency situations), there is a common issue: enhancing safety through prevention and protection.

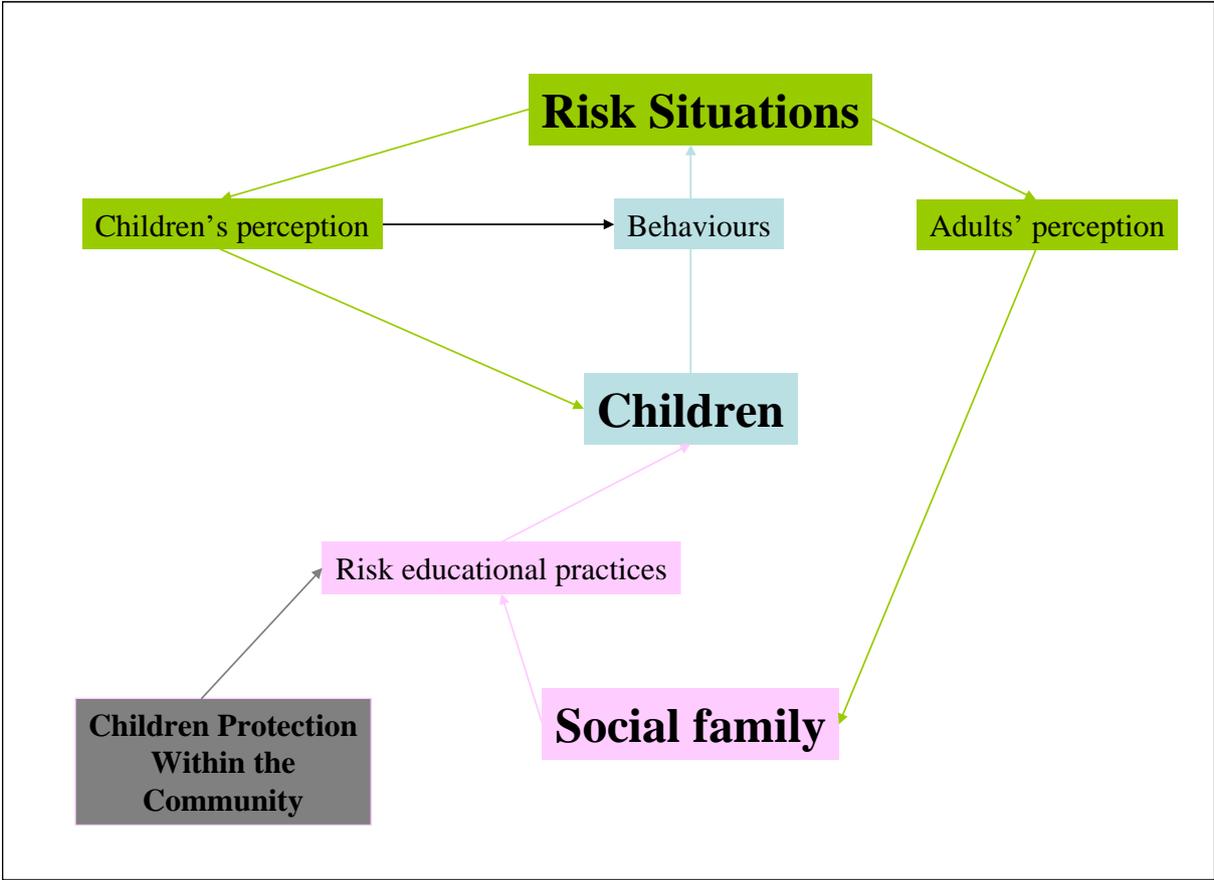
The first reflex is to consider that categories of risks should be analysed and specific procedures of prevention and protection must be developed for children. Thus, numerous educational booklets of procedural information and communication campaigns are designed for children and circulated in society. This is certainly a major and concrete perspective to enhance safety, but the pedagogical engineering of the message usually delivered is, in many cases, oriented by fear-appeal and message repetitions. This orientation is not free from perverse effects. Indeed, fear is not the best state of mind to face risk situations. In addition, children's ability, responsibility and autonomy are considerably overestimated. The result on children's development and wellbeing might be disastrous because of the downgrading advices and supports of parents and caregivers, as well as the anxiety due to excessive responsibility and culpability feelings, educational disorientations and isolation.

Therefore, we suggest a complementary and innovating perspective, aiming to develop children's psychological and social potential to face risk situations and recover **with** the support of their community. Relations between children and their community (which we named *social family* referring to relatives and caregivers) are especially taken into account. A specific focus is the community general concern and ways of education regarding children. The purpose is to assist educational relations between relatives, caregivers and children when it comes to the discussion and the elaboration of fundamental skills to deal with risks. By fundamental skills, we refer to psychological and social patterns which help to cope with risks, as for example the ability to stay calm or the development of trust between children and adults. The purpose is to enforce self protection of children with their social family, their community, through education development. A major expectation is the enforcement of bonding within the community which appears to us as the core of risk coping.

The proposal is to prepare the design of an appropriate tool supporting a positive interaction between children and their social family about risk, and it supposes the understanding of psychological and social dynamics of education within the community regarding risk situations' appreciations. Therefore, the purpose of this

document is to provide a bibliographical review to present selected literary references to enlighten the relation between children’s behaviours in risk situations, social family risk educational practices and protection practices. How do we describe this relation? A model is proposed for Children’s Protection within the Community and is presented below. Children’s behaviours’ in risk situations represent the dynamics of children’s reactions when they are confronted with risk. We consider transversal characteristics of risk situations independently of categories of risks, for example, frightening, pains or suffering or death confrontation. Children’s risk perception represents, within this approach, a major psychological process which impacts children’s behaviours. In addition, risk educational practices influence children whereas their entire education and the construction of risk education is partly based on adults’ perception of risks.

Therefore, in this general model, the protection of children within the community aims to support educational practices. To this purpose, the understanding of each dimension is essential to provide adequate and suitable support.



In the first chapter, we consider the different situations of risk which might impact children. We briefly list those situations, the dangers encountered and their risks for children.

Children’s behaviours, when they are confronted with those situations, are of different forms in relation to their risk perception. We thus present the major research results on children’s risk perception and children’s behaviours in the second chapter.

In the third chapter, we enlighten social family risk educational practices and their impacts on children's behaviours. First, we consider adults' risk perception assuming that it influences risk educational practices. Second, we consider forms of social family risk educational practices.

In the fourth chapter, we present children's protection within their community addressing risk educational practices and ways of enhancement.

Our purpose here under is to provide a general overview listing the main outcomes of each dimension. We present them in synthetic results at the end of each section.

## II. Different situations of risk for children

Situations	Dangers	Risks
<b>Conditions of daily life situations:</b> - Environmental conditions - Economical conditions - Social conditions	Isolation (abandoned children, orphanage, ...)	- Psychological traumas
	Abuses (violence, sexual or work exploitation)	- Physical and psychological traumatism - Sexually Transmitted Diseases
	Water and environmental sanitation and hygiene	- Measles - Infectious diseases (cholera, malaria, dengue hemorrhagic fever) - Intoxications : unsafe drinking water - Diseases related to oral-faecal contamination
	Nutrition	- Malnutrition
	Education	- Exclusion - Illiteracy
	Health care (medical prevention, vaccination)	- Measles
	Risk behaviours (addiction, risk taking)	- Physical and psychological traumatism - Sexually Transmitted Diseases

<b>Emergency situations :</b> - Disasters (natural disasters, technological disasters) - War - Daily life accidents (fall, burn, intoxication, drowning, transportation, sexuality, ...)	Isolation (abandon children, orphanage, ...)	- Psychological traumatism
	Abuses (violence, sexual or work exploitation)	- Physical and psychological traumatism - Sexually Transmitted Diseases
	Water and environmental sanitation and hygiene	- Measles - Infectious diseases (cholera, malaria, dengue hemorrhagic fever) - Intoxications : unsafe drinking water - Diseases related to oral-faecal contamination
	Nutrition	- Severe acute malnutrition
	Risk behaviours (risk taking)	- Physical and psychological traumatism

When it comes to risk, any risks, children are recognized to be the most vulnerable group, along with women (UNICEF, 2007, 2008). It is recommended that simple and practical initiatives be created in order to teach children and their parents about risk, including information programs.

The transmission of knowledge through parenthood seems to us essential. Our purpose is therefore, to support this transmission, but as stated in the introduction,

common procedural information and communication campaigns do not take into account children and community upholding.

Thus, we analyse, children's behaviours in risk situations, social family risk educational practices, and protection within the community, in order to understand how information might address fundamental needs of children within their community to cope with risk situations.

### III. Children's behaviours in risk situations

The sustaining of self protection oriented toward children has to take into account the psychological needs of children. For example, the meaning of information will be understood by children in accordance with their cognitive and emotional abilities.

Risk perception, emotion, risk taking, coping are major axes of risk situations. It is important here to note that the purpose is not to highlight the negative aspects of risk situations in order to present them to children and their community. On the contrary, pedagogical engineering suggests that positive information is more adequate to the learning process than negative information. The questions addressed here are: What are the specificities of children? How do children think and feel? How could we support them the best?

#### 1. Children's risk perception

##### 1.1. Risk evaluation

- o Age effect

According to Chauvin and Hermand (2006), results of studies show that there are no systematic differences between children's risk evaluation and adults' risk evaluation. The methodology consists to compare the rating of a series of risk items (around 100 items representing different risk situations) for different groups of ages (children, teenagers, young adults, adults and elders).

- Some studies highlight higher evaluation for children (Sjöberg & Torell, 1993), Hermand & al., 1999).
- Other studies show similar evaluation for children and adults (Ahmed & al., 2006).
- Several studies show lower evaluation for children (Cohn & al., 1995; Lai et Tao, 2003; Zhang, 1994).

The perception of hazards to human existence seems to depend less on age than on type of situations (Walesa, 1977).

Those results invite us to suggest that children's evaluation of risk might be linked to the gravity estimation of the risk situation, as it is the case for adults (Fiedler, 1996).

Indeed, children's evaluation of risk might be different considering the gravity of risk situations because their lack of death conceptualisation limits their consciousness of danger.

- Death conceptualisation and consciousness of danger

Death conceptualisation (Hubacher, 2001) is a two period phenomenon varying along with children's experience (especially confrontation to death for themselves or for their relatives).

- From 4 years old to 11 years old,
  - The irreversibility of death appears in relation with the distinction between the permanency versus impermanency of object and human beings.
  - The universality of death appears related to the representation of others (especially relatives) as ordinary human beings.
- Only after a various time of mystery feeling, death is represented as an "*end of nothingness*".

Those stages seem to impact to consciousness of danger development.

Considering daily life situations, danger consciousness might appear for young children but is limited by the fact that death is not yet completely conceptualized. According to Hubacher (2001), consciousness of danger appears along children development from 4 to 10 years old. Three stages exist. First, children (from 4 to 6) have a high consciousness of danger (they feel highly unsafe in any risk situation). Second, children (from 6 to 8) start to anticipate danger (they feel potentially unsafe before a risk situation). Third, children (from 8 to 10) develop preventive behaviours (they learn to avoid risk situations or to protect themselves using equipment for example).

In considering emergency situations, consciousness of danger fluctuates (Le Breton, 2004) along with death conceptualisation. Between 11 and 16 years old, children might still feel that they can do everything and that events are reversible.

For youth under 16 years old, accidents are considered as ordinary and damages are undersized. The consciousness of lethal danger appears more realistically around 16 years old.

## 1.2. Diagnostic ability

The development of children's risk perception with respect to certain risk categories is presumably conditioned by the specific development of children's abilities (Walesa, 1977).

Children have different diagnostic abilities regarding their psychological process to understand situations.

- From 0 to 7 years, they assess a situation in a kinaesthetic way. They feel rather than think the situation. Sensorial and motor perceptions are guiding their understanding.

- From 7 to 12 years, children begin to proceed intellectually with concrete operation. Their reflexion focuses concrete phenomenon perceived which they categorise and connect in causes and effects.
- From 12 to 18, they start to conceptualise perceived phenomenon in an abstract way. Logical links are made between facts and concepts, so that they become capable of logical and abstract reasoning.

In this Piagetian theory, young children's main limitations seem to be linked to the principle of change of routines or drills from one age to another.

According to Hargreaves (1996) and, Houdé and Meljac (2000), the reformulations of Piagetian theory, the "Stage theory", rather than discriminating a "pre-operational stage" or an "egocentric stage" specific to children, prones a global approach of children's cognitive development.

Recent studies of attention and memory show that the amounts of information children are able to process improves with age, as does their resistance to distraction. The interaction between age and abilities changes in environmental circumstances.

Children of 6 to 10 years old are able to produce judgement about risks (Hillier & Monrrogiello, 1998). Unsurprisingly, six years old children are identifying lesser risks and are slower than ten years old children. Boys are lowering the level of risks comparing to girls. However, the perceived vulnerability is the best predictors of risk evaluation (Boles & al., 2005) and girls' vulnerability is still a common stereotype (Morrongiello & Rennie, 1998; Granié, 2005).

Considering risk situations, a specific quality of youth under 12 years old is the lack of practical experience (including experience of their vulnerability) and the lack of information (especially conceptual information) which is the main reason for which young people are unprepared for risk situations, thus becoming the most vulnerable group (Greening & al., 2005).

The occurrence of different kinds of accidents and mechanisms of developmental change is essential in formulating programs for safety education (Hargreaves, 1996).

## **2. Children's behaviours**

### **2.1. Emergency situation and emotional impacts**

This section addresses specifically emotional reactions of children when they are involved in an emergency situation. We quote a FEMA report (FEMA, 2004) providing a short resume of children emotional reactions according to their age.

#### *Birth through 2 years:*

*When children are pre-verbal and experience a trauma, they do not have the words to describe the event or their feelings. However, they can retain memories of particular sights, sounds, or smells. Infants may react to trauma by being irritable, crying more than usual, or wanting to be held and cuddled. The biggest influence on children of this age is how their parents cope.*

*As children get older, their play may involve acting out elements of the traumatic event that occurred several years in the past and was seemingly forgotten.*

Preschool - 3 through 6 years:

*Preschool children often feel helpless and powerless in the face of an overwhelming event. Because of their age and small size, they lack the ability to protect themselves or others. As a result, they feel intense fear and insecurity about being separated from caregivers. Preschoolers cannot grasp the concept of permanent loss. They can see consequences as being reversible or permanent. In the weeks following a traumatic event, preschoolers' play activities may reenact the incident or the disaster over and over again.*

School age - 7 through 10 years:

*The school-age child may have<sup>1</sup> the ability to understand the permanence of loss. Some children become intensely preoccupied with the details of a traumatic event and want to talk about it continually. This preoccupation can interfere with the child's concentration at school and academic performance may decline. At school, children may hear inaccurate information from peers. They may display a wide range of reactions – sadness, generalized fear, or specific fears of the disaster happening again, guilt over action or inaction during the disaster, anger that the event was not prevented, or fantasies of playing rescuer.*

Pre-adolescence to adolescence - 11 through 18 years:

*As children grow older, they develop a more sophisticated understanding of the disaster event. Their responses are more similar to adults. But<sup>2</sup>, teenagers may become involved in dangerous, risk-taking behaviours, such as reckless driving, or alcohol or drug use. Others can become fearful of leaving home and avoid previous levels of activities. Much of adolescence is focused on moving out into the world. After a trauma, the view of the world can seem more dangerous and unsafe. A teenager may feel overwhelmed by intense emotions and yet feel unable to discuss them with others.*

In emergency situation, children are easily overwhelmed by emotions (stress, fear, pain, ...) and by the difficulties of the situation.  
From birth to 7 years, children lack the ability to protect themselves and others. Crying, asking for help, intense fear and insecurity are related to the separation with adults. The event overwhelms them.  
The parental and caregiver coping is crucial for them as well as their protection.  
From 11 to 18 years, teenagers' feeling of danger and vulnerability can be so important that they might be overwhelmed by fear emotion. They might react by denial and risk taking or disproportionate risk evaluation and isolation.  
The conclusion is that in any of these cases, adults' mediation is crucial for children's protection.

## 2.2. Risk taking

Zukerman (1994) has argued that individual's emotional reactions (e.g. avoidance of fear), influence risk taking, for children, adolescents and adults.

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<sup>1</sup> Precision added by authors.

<sup>2</sup> Precision added by authors.

Analysis of risk taking leads to a model of addiction based on the search of stimulations (Michel & al., 2003). Major internal factors of risk taking are: personality (e.g. impulsive personality) and pathology (e.g. identity disorder, depression) (Michel & al., 2006). Boles and al. (2005) concluded their study highlighting that, children reported as highly active, have a low evaluation of vulnerability and injury risk so that risk taking is more usual for them.

Developmental factors, cognitive-developmental stages, social cognition and environmental competence of child are linked with risk taking.

The effect of age and risk perceptions was found to be dependant on the age of the child and the nature of the risk situation.

Schwebel & al. (2004) analyse the correlation between children's temperament, parenting and risk taking. Results show that hyperactive temperament enhances risk taking as well as lack of positive parenting. Interaction effect shows that positive parenting reduces risk taking of hyperactive children.

The most crucial factors seem to be personality (impulsivity and hyperactivity), children pathology (psychological disorders), and forms of parenting. In accordance with Morrongiello and Matheis (2007) results, both cognitive and emotional factors contribute to children risk taking. Indeed, rating of risks (high versus low) and fear and excitement (sensibility) are correlated with risk taking importance.

### 2.3. Children's coping

Coping is described as "*the set of cognitive and emotional efforts assuring the overtaking of external and/or internal specific constraints challenging or exceeding the usual resources of an individual*" (Lazarus & Folkman, 1984). Described by Vinay & al. (2000), the coping process relies on the assessment of risks and dangers and the evaluation of internal and external vulnerability and capability.

Coping efforts can be classified regarding the strategies to answer the constraints: problem solving strategies and emotional strategies (Ronan & al., 2001). Problem solving strategies focus behaviours able to answer the situation. Emotional strategies are psychological processes of emotion appeasement.

During childhood, strategies of coping are developed (Compass, 1987). These strategies are the foundation of the ability to cope with risk situations (Esparbès-Pistre, 1997).

According to Vinay & al. (2000), in risk situation, children's coping is enhanced by specific factors:

- social support (Durning, 1995; Loutre du Pasquier, 1981)
- trust (Toussignant, 1998; Erikson, 1966)
- learning motivation (Moro, 1989)

- identity valorisation (Durning, 1995; Wallon, 1941)

Beyond coping, resilience is the ability to overtake the impact of confrontation with situations constraints. In short, coping is the reaction within the situation, and resilience is the reaction afterwards. However a resilience process is based on the success of coping, which depends on: giving sense to the situation based on imagination and creativity (Guedeney, 1998), optimism (Cyrułnik, 1999), efficient risk taking and initiative (Le Breton, 1995), flexibility and change of usual behaviours (Rowland, 1989).

Children's coping and resilience appears as a multifactor phenomenon strongly related to internal and external factors.

Internal factors represent complex skills: vulnerability and capability perception, learning motivation, identity valorisation, imagination and creativity, optimism, efficient risk taking and initiative, flexibility of usual behaviours.

We assume that these factors are strongly limited by:

- 1/ the difficulties of children to assess risks and dangers, especially when they are lethal,
- 2/ the difficulties of children to understand the situation, due to their lack of experience and information,
- 3/ the emotional sensibility, inducing intense fear and insecurity,
- 4/ and the risk of inefficient risk taking due to internal factors or emotion.

External factors are therefore essential especially social support, parenting and trust.

### **3. Children's risk perception, coping and preparedness programs**

#### **3.1. Children's perception and coping**

As mentioned by Ronan & al. (2001), *"Simply stated, there is a dearth of research-based literature in the area of children's risk perception in relation with children's forms of coping. Where other data exist, it is in the form of children's reactions to the occurrence of a risk."*

The general findings are that, children's coping strategies (problem oriented or/and emotion oriented) are chosen in regards to a combination of factors:

- pre-existing characteristics (e.g. demographic factors including asthma status, age, gender, ethnicity, pre-existing emotional problems),
- direct exposure,
- availability of adaptive coping resources,
- occurrence of major life stressors (e.g. parental disorders, family death) following a hazard situation,
- access to social support.

### 3.2. Children's perception, coping and preparedness

The literature reviewed by Ronan & al. (2001) indicates that few researches to date have yet assessed factors related to children's risk perception, children's form of coping and preparedness prior to a hazard's occurrence.

Children generally are aware of both problem-focused and emotion-focused coping strategies related to a future hazard (Ronan & al., 2001).

- Findings indicated that children who demonstrated reasonably accurate risk perceptions, showed a generalised awareness of essential risk mitigation protectiveness factors, and a moderate to strong belief in their ability to cope emotionally with future hazard.
- Children with more unrealistic risk perceptions were found to demonstrate increased hazard-related upset, a decreased belief in their ability to cope with a future hazard, and a reduced awareness of hazard-related protective behaviours compared to children with more realistic risk perceptions.

Some recent data have supported that the use of hazard-relevant education programs in the aftermath of a hazard helps reduce children's fears and increase ability to cope with stimuli related to hazard (Ronan & Johnston, 1996; Ronan & Johnston, 1997). Children involved in hazard education programs demonstrated more stable risk perceptions, reduced hazard-related fears, and a much greater awareness of important hazard-related protective behaviours compared to children who reported not being involved in a hazards education program. In addition, children involved in two or more education programs were significantly more aware of these protective behaviours than children involved in only one education program.

Children's perception appears therefore to impact risk protection awareness and vulnerability perception. Accurate risk perception benefits awareness and confidence in coping ability while unrealistic risk perception seems to produce a reduced risk protection awareness and a higher vulnerability perception.

Eventually, education programs demonstrate their weight for accurate risk perception.

## IV. Social family risk educational practices

Children's development is deeply related to educational practices. The community structures and orients their activities. At the same time, children participate in community activities. Children and the community can be approach as an integrated system of multiple interactions between children and adults. The understanding of children is therefore related to the understanding of the whole system of education. Its main dimensions are related to risk (risk perception) and norms, role, childhood awareness, attachment, supervision and parenting.

## 1. Social family

« *The understanding of the ways people think or interpret risks can't be reached without taking into account the social and cultural context within which risks are developed and discussed*” Lai et Tao (2003, p. 670)

Social family of children can be defined, regarding community and group definitions in social psychology.

A community is the human environment characterized by the sharing of practices, a common history, usually the same language, and, institutions, laws and regulations, structuring this social environment.

A group is a smaller composition of individuals characterized by a limited extension and duration. The criteria (e.g. relatives, co-workers, friends, etc.) may be objective or subjective and is defined by the relation between each individual.

We thus define social family as the immediate social group of children represented first by relatives, and second, by caregivers.

## 2. Adult's risk perception factors

Chauvin and Hermand (2006) presented a literature review from which we extract the following results on distal and proximal factors of adults' risk perception<sup>3</sup>.

### 2.1. Distal (non explaining) factors

#### Education:

All the researches focusing the relation between risk perception and education indicate the same result; the less education a person has the more they overestimate risk. This effect seems to be linked to the fear feeling and the estimation of self exposition to risk which differ along with the level of education (Savage, 1993).

#### Profession:

Several studies have highlighted the impact of the profession on risk perception. Sjöberg & al. (1996) studied risk perception in Bulgaria and Romania. Six groups of individuals (students in Economy and Engineering, nurses, teachers, workers, and unemployed) evaluated 100 risks assessing the lethal probability. In both Bulgaria and Romania, nurses had the higher evaluation and engineers had the lower ones. It seems that profession has a stronger effect on risk evaluation. Experience related to profession, as risk confrontation, might be involved.

#### Income:

The income effect is related to education and profession. Bastide & al. (1989) have shown that individuals with low incomes have a higher aversion for industrial risks

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<sup>3</sup> References presented in this section are quoted by Chauvin & Hermand (2006).

than individuals with higher incomes. Those results are confirmed by Vaughan and Nordenstam (1991). It seems that poverty enhances risk evaluation.

## 2.2. Proximal (explaining) factors

### Gender:

Most of the studies show that women's risk evaluation is higher than men's risk evaluation (Slovic, 1999). Nevertheless, explanations are linked, less with genetic impacts, and more with cultural factors as for the feminine vulnerability stereotype.

### Expertise:

Risk perception appears different in regards to the source of information is scientific or common sense. Scientific evaluations are perceived as more rational, factual and thus valuable. On the contrary, public estimations are perceived as irrational, affective and hypothetic (Slovic, 1987; Slovic & al., 1979, 1980, 1985; Slovic, 1992; Sjöberg, 1996, 1998).

### Political and religious orientation:

Bastide & al. (1989) studied technological risk perception in France and Germany. There is a strong risk perception difference between those two countries representing different social acceptability of technological risk. Based on 1000 interviews, the difference can be attributed to different political orientations. Individuals affiliated to strong Democratic Party show a high aversion while individuals affiliated to Conservative Party underestimated risks.

The religious orientation effect is related to the degree of religious engagement and to the nature of the religion itself.

Sjöberg & Wahlberg (2002) studied the degree of engagement for 151 Swedish profanes with the SROS II (Swedish Religious Orientation Scale version 2, Hovemyr, 1996). "Having fate" and "Using fate to understand the purpose of life" are correlated to risk perception.

According to Kouabenan (1998, p. 243), "*the persistence of animist religious beliefs and practices might induce systematic judgment errors.*" 553 Ivorian individuals fulfilled a questionnaire about driving risks and their beliefs on destiny. Results show that fatalists have a contingent perception of driving risks.

Sjöberg & Wahlberg (2002) studied the New Age belief in relation with risk perception with the RPBS (Revised Paranormal Belief Scale, Tobacyk, 1988). Four types of New Age beliefs appeared: Belief in a higher conscience, Belief in the reality of the soul, Analytical conscious denegation, and Common popular superstition. Nuclear risk is evaluated differently regarding the category of RPBS. This result has been reproduced by Sjöberg (2003, 2004).

### Comparative optimism:

Weinstein (1980, 1987) has shown that the risk is estimated higher for others than for us. Individuals estimate that they have a higher chance to experience positive events than others, and lower chance to experience negative events than others.

This result is mitigated by an individual sense of control (Causse, Kouabenan & Delhomme, 2004; Sjöberg, 2000) and personal experiences (Weinstein, Lyon, Rothman & Cuite, 2000).

Adult's risk perception is related to distal factors to be controlled: education, profession and income. Proximal factors as gender, expertise, religious and political beliefs, and optimism represented evaluation bias.

### **3. Social family risk educational practices**

#### 3.1. Social norms

Group decisions are usually more risky than individual decision (Kogan & Wallach, 1964). Excessive optimism seems to be responsible of risk taking (Janis, 1972). Within a group, individuals' choices are restrictively following norms to assure their identity within the group and the group cohesion (Janis & Mann, 1977). The main process is the imitation of others (Bandura, 1986).

The imitation process is enhanced when individuals do not know what to do, or feel ambiguity and uncertainty (Cialdini, 1989). Thus, risk educational practices shall be particularly sensible to a group's influences due to the similarity of risk context characteristics (e.g. ambiguity, uncertainty).

#### 3.2. Educational role

Zdanowicz & al. (2008) discuss the importance of differentiation between adults and children to limit children's risk taking. The legitimacy of adults' role, as an educational role, appears as a major factor influencing the construction of children's identity which helps limit children's risk taking.

Specific relations exist between youths and adults in certain groups. The gender relations in Muslim societies and Roma groups are linked with a particular role for children, their social and professional career, and the division of resources in the family. Resources for young girls are often not available as they drop out of school easily. In the Roma community, children aged 12-13 are already perceived as adults who form families and have children.

According to data from UNICEF for 2008, the average age when a person gets married in Bulgaria is 25 for women and 28 for men, whereas in 1994 a survey among 1844 Roma families established that 40% were married before turning up 16, and 32% before reaching 18. Additionally 8% declare having had a child before stepping up into marriage.

In any case, it appears important, for children's identity and behaviours, to preserve childhood and define clearly an educational role and responsibility for adults. Social norms for the end of childhood are important factors to take into account.

### 3.3. Childhood awareness

The link between care and childhood awareness has been highlighted by the study of Mcconkey and Smyth (2003). Parents stressed the amount of supervision required by teenagers who have severe difficulties ; but, results showed that this need is linked to the difference between teenagers' perception of risks, which are verbal abuse and bullying from peers, and, parents' perception of risks, which are risks while performing certain tasks (as road - crossing) or risk taking (as sexual risk taking). To these results corresponds the fact that parents usually overestimate children's ability less frequently than children themselves (Schwebel & Bounds, 2003).

A first ascertainment is that communication between children and adults is lacking in efficiency due to a lack of understanding of children's needs on behalf of the parents.

This result is confirmed by UNICEF (2007, 2008). Almost half of the parents in the survey shared the opinion that their children never had problems in the family, while only 17% of the children confirmed this. 87% of the children pointed out they had experienced problems in school but only 18% of them would seek help from teachers, pedagogic advisers or school psychologists.

Childhood awareness of parents is related to the estimation of children's abilities and adults' perception of the risks children encounter. It is probably related to social norms and educational roles.

### 3.4. Attachment

The attachment is the tied relation between parents and children, based on parental behaviours assuring proximity and contact between the young child and the parents (Ainsworth, 1978; Bowlby, 1969). Early attachment experiences form the foundation for the development of social relationships throughout the lifespan, determining later positive and/or negative interactional influences. Early experiences with parents, consistently characterized by nurturance, warmth, and predictability, will enhance higher quality peer relationships and more positive emotional adjustment (O'Koon, 1997).

The attachment helps children to feel secure regarding their environment (Bowlby, 1984). Attachment reduces fear and anxiety of children (Bowlby, 1984). This sense of security is correlated with a low level of risk taking.

Attachment reduces fear and anxiety of children. This sense of security is correlated with a low level of risk taking, but there is no direct evidence that this attachment enhances the acuteness of risk perception or the ability to cope with risk situations.

### 3.5. Supervision

For youngest under 7, results of studies have shown the positive effect of parental transmission of knowledge and supervision on children's behaviours in risk situation (Gable & Peterson, 1998). As shown by Schwebel and Bounds (2003). Six to eight years old, impulsive and under supervised children judge their physical abilities more cautiously when parents are present. Supervision of an elder brother or sister is also a factor of mitigation risk taking.

Supervision appears as a key factor of risk taking remediation for young children under eight.

### 3.6. Parenting

Parenting can be oriented differently in each family. A specific style of parenting has been studied called "sensitive style". The "sensitive style" is the one that supports the best development of social, emotional and cognitive abilities. These abilities are essential for anxiety mediation and learning process (Landry & al., 2006).

Sensitive style is based on both a cognitive and affective dimension. On the affective dimension, sensitivity to the affective needs of children is a mix of affection demonstrations. On the cognitive dimension, sensitivity to the cognitive needs of children is a mix of supports of verbalizations and development interests.

Some internal factors can compromise the sensitivity of parents. Categories can be suggested:

- factors related to social norms as beliefs in specific educational principles (Monrrongiello & Kiriakou, 2004, Monrrongiello & Rennie, 1998),
- factors related to the family interaction dysfunctions as communication dysfunction or depreciation of the parenting feelings (Humbeeck & Pourtois, 1995; Dukewich & al., 1996),
- factors related to the family inter relation as divorce, conflict or separation (Humbeeck & Pourtois, 1995; Macfie & al. 2008),
- factors related to the psychological state of parents as depression, negative perception or stress disorder (Humbeeck & Pourtois, 1995; Malik & al. 2007).

Some external factors are also correlated with sensitivity drop off:

- poverty (Grootaert & Kandur, 1995)
- quality of social care (Geoffroy & al., 2006).

Positive factors can mitigate the negative ones, especially social support from friends and family, educational role, childhood awareness, positive experience of attachment and supervision effort.

The social family could thus be oriented toward “sensitive parenting”:

- listening and behavioral adaptation to children’s affective needs
- interest and interactional answering to children’s cognitive needs

## V. Children protection within the community

The concept of self protection is enlarged from the individual protection to the community protection. Practices cover a wide domain, from information to behaviours. Within this domain, the role of information transmission is crucial. It is considered as a complex communication process between children and their community influenced by risk perception, values, and more over culture, so that the transmission between different generations appears central. This section’s goal is to abstract what may be the principles of information transmission.

### 1. Focus

In general, children’s protection focuses two objectives.

- First, it focuses on appropriate adults and children’s behaviours in risk situations. The question is therefore, how to educate them both, regarding cognitive and emotional abilities of children, and regarding adults’ risk perception and risk educational practices.
- Second, it focuses on environmental adaptation, which means to secure the environment.

To fulfil those two objectives, one best way is to develop an adequate children’s social environment for children’s education and environmental adaptation. We emphasize here children’s education within the community and more over educational information within the community.

### 2. Institutions’ and Parents’ respective communication role

We quote UNICEF reports (2007, 2008) highlighting three major results.

*Children and parents are not well informed about the role of institutions and who they should seek help from in specific daily situations (abuse, violence, etc.). The question “If your child has a problem you cannot deal with, which institution will you contact?” received very poor answers showing that parents are not familiar with their rights and procedures they should follow. 72% of the children and 65% of the parents answered “No” to the question “Are there professionals and institutions that may help you solve your problems in the place you live in?”*

*Parents and children have not learned to contact and trust institutions. The question “What will you do if the child of your neighbours is subject to violence?” received the following answers: more than half of the people replied that they would speak with the parents or simply*

*do nothing, considering that the problem should not be communicated outside the family. Only 13% of the participants in the survey indicated that they will alert the proper institutions. The result was more or less the same when interviewing the children.*

*An alarming conclusion is that institutions, parents and schools try to transfer to one another the responsibility for communicating with the children, accusing one another of the situation.*

Considering this fact, the clarification of institutions' and parents' respective communication role is essential.

### **3. Educational information**

The social construction of child welfare meeting the child's developmental needs and supporting family functioning needs to challenge socio-political and mass media perspectives (Angling, 2002).

The question of risk educational information is related to the need and the possibility of individual to accept the information (Poumadère, 2009). This acceptability of the information is impacted by the characteristics of risk situations regarding individual socialisation. Indeed the proximity of risk situations as industries, settlements, or volcanoes imply usual risk proximity, positive identity, economical opportunity and social life developments. These characteristics are ensuring the acceptability of risk and the aversion for risk information which appears as "bad news" considering the social benefit of a risk situation.

Risk educational information for population awareness is therefore, related not only to the transmission of objective data but also related to the negotiation of the social characteristics of risk situations.

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# Risk Reduction Education in Belgium, Bulgaria and France

Chantal Dauphin

## General introduction

**Our objective is to give an overview of the present state of the art on risk education in school of children between the ages of 8-10 years old in three countries: Belgium, Bulgaria and France.**

**We used the selected method of analyzing the school syllabus and the official texts of each country.**

## I. Belgium

Their teaching does not fully integrate the prevention of risks.

It is vital that integration of safety, health, general well being at work, in society, and in teaching must form a basis to implement a culture of risk prevention. Experts have exposed this process of prevention culture development and the part played by teaching in it within the framework of a forum on this theme.

(<http://fr.prevent.be/net/net01.nsf/p/9AC4433FF2BE636EC1256CF70039DE47>)

It has to become a priority to improve and control risk related to safety for children, pupils, teaching staff,(nursery nurses, receptionists) and teachers. They must all be taught attitudes in general risk perception from 2012 onwards.

Risk perception, risk control, and safety must be integrated in the programmes (development objectives and common base skills) in primary schools, and in teacher training schools by 2012 both in the Flemish and Walloon communities.

Currently, road safety prevention is not included in the primary school syllabus as such, and the teachers are free to bring information on safety prevention, in partnership with experts in the field: The Red Cross, Police force, IBSR, firemen, civil protection and other organisations (health and hygiene).

A programme on the study of road hazards (undertaken by the IBSR) is not accessible before the end of year 2009 when it will be circulated in primary education.

## II. Bulgaria

Risk prevention education in elementary and secondary schools in the Republic of Bulgaria is legally defined in Article 16 -1 of the Law on Disaster Preparedness, which states that risk prevention and first aid education is to be conducted in schools and universities. In elementary school this training provides basic knowledge about risks and behaviour to adopt during disasters, whereas in secondary school and university the training deals with defence skills according to the education profile.

According to Article 3 of the same law aforementioned, it states that the Minister of Education in co-operation with the Minister of Emergency Situations certifies training programmes, educational materials, and textbooks for kindergartens and schools.

The education in schools is conducted according to the instruction of the Minister of Education and Science who in 2002 set the training allocation to be 5 school hours per year in the Master teacher class from 1<sup>st</sup> to 12<sup>th</sup> grade ( 7 to 18 year old students). These hours also include two simulations of the school disaster reaction plan. The education programme is developed in co-ordination with the State Agency "Civil Protection", National Service "Fire Safety" - Ministry of Interior, and the Bulgarian Red Cross.

A set of "Life protection and reaction to crisis" lessons is included in primary education, and is defined in the State regulations on Civic education. This part of the curriculum focuses on road safety and deals with life and health threatening situations, incidents, and conflicts.

According to Ordinance No.2 dated May 18, 2000 pertaining to the school curriculum issued by the Ministry of Education and Science, it states that after completion of elementary school and the compulsory training every student must have achieved the following:

- The student has developed communication skills and a sense of confidence.
- The student has developed basic skills on dealing with critical situations and conflicts.
- The student has knowledge on basic rights, freedom, and responsibilities.
- The student has knowledge on the rights of children and organizations working in this field..
- The student has knowledge on Life protection and how to react in critical situations.
- The student has knowledge on road safety and follows the safety rules.
- The student has knowledge on what course of action to take and knows who to contact in the case of life and health threatening situations (disasters, incidents).

These standards have a practical purpose and are included in the Cultural-education area of expertise, "Community Science and Civic Education". The civic education is an important cross curriculum subject in their compulsory education, which is why these standards are included in the school programmes of different subjects such as 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> grade History and Geography.

### **III. France**

#### **1. Introduction**

Determined by the guidance and planning law for the future of schools dated April 23, 2005, the Decree of July 11, 2006 states what knowledge and skills all pupils must have acquired at the end of their compulsory schooling in conformity with the European programme.

The common base consists of 7 pillars of competences:

- 1.- mastering the French language.
- 2.- speaking a modern foreign language.
- 3.- basic knowledge in mathematics, and scientific & technological culture.
- 4.- mastering techniques for information and communication technologies.
- 5.- humanist culture
- 6.- social and civic skills.
- 7.- autonomy and initiative.

Each competence is diffused in the whole series of studies which can be resourced to help acquire essential abilities and attitudes when necessary to tackle a variety of situations throughout life.

During his life, each citizen is faced with a certain number of risks and he must be capable of adapting his behaviour to ensure his survival as well as that of that of the community which he lives in. This is clearly stated in the code of education:

Article L. 312-13-1, "Each student through compulsory schooling is to be made aware of risk prevention, and the work of the emergency rescue services. He must also receive elementary first aid lessons".

At the end of his schooling the pupil and future citizen to be must have acquired knowledge, abilities, and attitudes allowing him to understand and react accordingly to any circumstances pertaining to safety protection and risk prevention.

During his compulsory schooling he will be taught about the following risks:

- everyday life risks
- natural and technological major risks
- health risks

#### **2. What is taught in general in the curriculum for the 8 - 10 year old age group.**

The summary tables in the appendix shows the progression of studies at primary school level and it includes the compulsory syllabus for the 8 - 10 year old pupils. The knowledge, abilities and attitudes included in the official programmes to be taught for the three categories of considered risk are listed.

To sum up, risk reduction education remains minimal but is part of a whole that shows a real progressiveness for 6-18 year old pupils when taking in account all the programmes (see attached annexes ).

In secondary school risk reduction education is taken up again in the collective community education just like health or sustainable development education. In the 5<sup>th</sup> class (12 year olds) this course is to be very strongly developed from 2011 onwards.

Risk reduction education will be locally adapted to:

- the geographical localization of the educational facility - school, college, in particular taking into account the various types of specific risks incurred locally (seismic, industrial, etc).
- the connections between local representatives of the Interior, Sustainable Development and the Education Ministries, school staffs and associations in charge of the major risks reduction.
- the general annual plan of prevention including the Specific Safety Operation Plan (PPMS, Plan Particulier de Mise en Sureté) which must be implemented in each establishment.

Living with “zero risk” is not possible, therefore, every future citizen must become aware of his duty to be informed about:

- his own vulnerability and how to diminish his weaknesses.
- the necessary preventions and protections that have to be adopted within the community which he belongs.

### **3. General survey: the work is progressing with difficulties**

School teachers can be trained with the assistance of institutional partners (teacher trainers, administration officers, decentralized services of the ministries, local authorities, and associations). This training sometimes runs concurrently with the simulations conducted under the PPMS plan.

The impetus can be started by just the drafting of a risk reduction project which is included in the total school project agenda.

French training and projects are in conformity with:

- International United Nations Strategy for Disaster Reduction Secretariat (ISDR Secretariat) and UNESCO joint project: “to make our schools safer”, the International Day for Natural Disaster Reduction (2<sup>nd</sup> Wednesday of October)
- Council of Europe and the European Union recommendations on education (Second Civil Protection Forum held in November 2007).

#### **4. Conclusion: in the case of France**

The inclusion of road safety and major risk reduction education in the school syllabus and teacher training have been gradually introduced over the past twenty years. Networks of decision makers, stakeholders, and trainers exist. However, there is no standardised set of training for risk reduction education.

There are two essential reasons to explain it:

-Schools are caught in a web of multiple programmes, art education/health education/defence education, etc.

-There is no strong political agenda; both the economic and political worlds have some difficulties to perceive the benefits that could be brought by prevention education. UNESCO report 2009 has mentioned it.

Sometimes local associations undertake projects with schools for example: in Tours, Avignon, and Nice. The firemen linked up with local authorities to set up school activities in the Alpes Maritimes and Seine and Marne....

Goodwill and exemplary actions do exist locally.

#### **IV. Conclusion for Bulgaria, Belgium, and France**

This short review on the good teaching practices for risk prevention and behaviour guidance development to face risks shows it is clear that there is a substantially larger development in the drafting of the official school syllabus than in the past (it is worth noting that France would be more in advance than Belgium, but that Bulgaria holds a good position in Europe too).

The three studied countries show similarities concerning the existence of local experiments without formal and effective generalized programmes covering their entire territories.

The local initiatives are often due to the actions of associations or national lobbies (insurance companies, ministries, etc...)

This project would integrate itself in this total process in order to generalize this education by progressive dissemination.

By leading the parents or the entire family to carry out a progressive risk education course in order to help them face the various dangers in life would be the wisest decision.

Or maybe we have to take the example of Canada and plan parent training?

## V. Annexes

### 1. Glossary for risk reduction education

Common base of knowledge and skills: socle commun de connaissances et de compétences

Pillars of skills: piliers de compétences

Risk reduction education: éducation aux risques

Skills : compétences

Abilities: capacités, aptitudes

Attitudes: attitudes, comportements

Curriculum, curricula: programme scolaire

Syllabus, syllabi: programme scolaire

Cross disciplinary: inter disciplinaire, à la croisée des disciplines

Compulsory schooling: école obligatoire

Civic duty and morals: instruction civique et morale

Sustainable development education: éducation au développement durable - EDD

Medium grade2 (France): Cours moyen deuxième année - CM2 (à 10 ans)

Media education: éducation aux médias

Teacher training: formation de formateurs

Educational materials: outils pédagogiques

Elementary school or primary school: école primaire (élèves de 6 à 11 ans en France)

Cultural education: enseignement des arts et de la culture

1st, 2<sup>nd</sup>, 3rd, 4th Grade (Bulgaria): niveaux de classe pour les élèves de 8 à 12 ans

Every day life risks: risques de la vie courante

Health risks: risques sanitaires

Major risks: risques majeurs

Hazards: risques, dangers

Disaster: catastrophe

Specific safety operation plan: plan particulier de mise en sûreté - PPMS

First certificate for Road Safety Education: attestation de première éducation à la route - APER

To learn how to bring help: apprendre à porter secours - APS

Belgium safety road Institute: institut belge pour la sécurité routière - IBSR

Exemplary actions: bonnes pratiques

Impetus: impulsion

Dissemination: diffusion

**2. Annexes on risks reduction education in French curricula:**

- 1- Everyday life risks
- 2- Seismic and volcanic risks
- 3- Weather risks
- 4- Technological major risks
- 5- Health risks

Table 1

<b>VI. Table EVERYDAY LIFE RISKS</b>			1.
<b>DOMESTIC RISKS:</b>	<b>at home, at school, do-it-yourself jobs, gardening, sports</b>		
<b>Primary School (8-10 year old)</b>			
<b>Knowledge</b>	<b>VII. Abilities</b>	<b>Attitudes</b>	<b>Methods of Evaluation</b>
<p><b>Civic Duty and morals:</b>          To know the importance of laws in the organization of social relations in regards to dangerous games and safety rules.          First aid training, phone numbers for parents and primary rescue emergency services.          Knowledge of risks related to the use of Internet.          Responsibility shared between generations.</p>	<p>To be autonomous and responsible for oneself.          Respect rules, show self-respect for oneself and others.          (To have moral and social values)</p> <p>To consider the consequences of one's actions and avoid putting the life of others in danger.          To make the right decision when to call in the emergency services and to be able to perform simple first aid.          To co-operate with one or more classmates.          To take decisions and commit oneself to a course of action.          To ask the opinion of others, to share and exchange information.</p>	<p>To follow safety rules.          To show responsibility towards others.          To feel the need for solidarity with others.          To share mutual aid.</p> <p>To be willing to take charge of oneself.          To be aware of the need to be involved.</p>	<p>National evaluation of CM2 base</p> <p>APER          (First certificate for Road Safety Education)</p> <p>APS</p>

<p><b>Applied science and technology:</b> To know the elementary safety principles of electricity and how some mechanisms make it possible to transmit a movement.(mechanical movement)</p> <p><b>Autonomy in Physical &amp; Sports Education:</b> To carry out a measured performance, to adapt oneself to changes of different types of environment (e.g. swimming) and to use all of one's faculties efficiently.</p>	<p>To carry out an investigation process. To organize and make tests. To develop manual skills. To perceive the difference between reality and the virtual.</p> <p>To make use of one's knowledge about the body in order to take controlled risks safely. To swim a length of 30m. To guide oneself by using a map.</p>		<p>(To learn how to bring help)</p>
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**Table 2**

<b>NATURAL MAJOR RISKS</b>			2.
<b>SEISMIC AND VOLCANIC RISKS</b>			
<b>Primary School (8-10 year old)</b>			
<b>PROGRAMMES AND COMMON BASE</b>			
<b>Knowledge</b>	<b>Abilities</b>	<b>Attitudes</b>	<b>Methods of Evaluation</b>
<p><b>Applied science:</b> Seismic and volcanic risks for human society. Sustainable development education.</p> <p><b>Geography:</b> Earth (oceans, topography, great climatic fields....) Concepts: resources, constraints, risks, sustainable development.</p>	<p>To practice investigation processes.</p> <p>To read a map.</p> <p>To locate a geographical space by using maps of different scales.</p> <p>To join maps of different scales to locate a phenomenon.</p> <p>To follow safety rules.</p> <p>To be attentive to natural risks.</p> <p>Media education.</p>	<p>To take initiatives, to pre-empt the attitudes to adopt in the event of major risks (zones at risk).</p> <p>To engage in the development of a collective project or in an action of solidarity outside of school.</p> <p>To show respect for others and feel one's responsibilities.</p> <p>To show solidarity for people who have physical difficulties.</p> <p>To make observations and have curiosity about certain phenomena.</p> <p>To have a critical spirit.</p> <p>To observe the elementary rules of safety.</p>	

		<p>To be aware of one's rights and duties.</p> <p>To be interested in public life and the great stakes involved for society.</p> <p>To be willing to take part in civic activities.</p> <p>To take responsibility for oneself.</p> <p>To be conscious of the need of being involved.</p> <p>To anticipate.</p>	
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**Table 3**

<b>WEATHER RISKS</b>			3.
<b>NATURAL MAJOR RISKS</b>			
<b>Cyclones, tornadoes, storms, floods avalanches, landslides</b>			
<b>Primary School (8-10 year old)</b>			
<b>PROGRAMMES AND COMMON BASE</b>			
<b>Knowledge</b>	<b>Abilities</b>	<b>Attitudes</b>	<b>VIII. Methods of evaluation</b>
<p><b>Applied Science:</b> 3 states of matter, changes of the state of water, the route of water in nature, (permeability, porosity, infiltration in the ground). To approach the concept of energy.</p>	<p>To practice scientific processes of investigation : To experiment, to formulate an hypothesis, to test it and debate it. To express and exploit measured results.</p>	<p>To have a sense of observation and be curious about the discovery of the causes of natural phenomena. To have a critical spirit: to know, observe and question.</p>	<p>National evaluation CM2</p>

**Table 4**

<b>TECHNOLOGICAL MAJOR RISKS</b>			4.
<b>Nuclear power risks, industrial and chemical risks, transport of dangerous materials, dam water breaks.</b>			
<b>Primary School (8-10 year old)</b>			
<b>PROGRAMMES AND COMMON BASE</b>			
<b>Knowledge</b>	<b>Abilities</b>	<b>Attitudes</b>	<b>IX. Methods of evaluation</b>
<p><b>Applied science and technology:</b>            State and changes of water, quality of water, the routes and transformation of water in nature.            Air and air pollution.</p> <p>Elementary principles of electrical safety: safety rules, dangers of electricity.</p>	<p>To practice scientific investigation processes: to experiment, to formulate a hypothesis, to test and debate it.            To express and exploit measured results.</p> <p>To follow safety rules.</p>	<p>To be willing to take charge of oneself            To be aware of the need to be involved.</p>	<p>National Evaluation            CM2</p>

**Table 5**

<b>HEALTH RISKS</b>			5.
Epidemics, pandemic, epizooties, food infection, safe drinking water, heat waves, extreme cold, air pollution.			
Primary School (8-10 year old)			
<b>PROGRAMMES AND COMMON BASE</b>			
<b>Knowledge</b>	<b>Abilities</b>	<b>Attitudes</b>	<b>X. Methods of evaluation</b>
<p><b>Applied Science: human body and health</b></p> <p>Sustainable development education: quality of air and water. Pollution of air and water.</p> <p>The human body and health education: consequences of our hygiene.</p>	<p>To make use of one's knowledge in different scientific contexts and in the activities of everyday life.</p> <p>To practice the principal rules of daily life hygiene.</p>	<p>To act responsibly towards life on earth and to take care of one's health.</p> <p>To have a sense of observation and be curious about the discovery of the causes of natural phenomena.</p> <p>To have a critical spirit.</p> <p>To follow the elementary safety rules.</p>	<p>National evaluation CM2</p> <p>APS (to learn how to bring help)</p>

## Pedagogical tools and programs

The state of the art presented an occasion to gather information on the existing pedagogical tools in risk education.

The research has been conducted firstly at an international level and particularly through the EURCYN network (The European Union Red Cross Youth Network) and also at a national level in the countries involved in the project:

- in Belgium through different ministries, civil or homeland security organizations like the fire fighters, the Civil Protection, the army, the police and through organizations like the National Office for Childhood of Belgium and the Belgian Institute for Road Safety
- in Bulgaria through different ministries, particularly the Ministry of Emergency Situations, the Ministry of State for Disasters and Accidents (former MES) and organizations like UNICEF Bulgaria and the Bulgarian Red Cross
- in France through different ministries like the Ministry of Interior and Ministry of Sustainable Development and associations like Prevention 2000, IFFO-RME.

The pedagogical tools presented hereafter have several characteristics in common. The majority of these tools focuses on a specific risk and tends to educate children to adopt the right behaviours when they have to face risk.

The tools are addressed specifically to the children, often not taking into account that the children belong to a community.

Preparedness is focused on individual skills and children's interaction with the wider community is disregarded.

Very few evaluations of these tools are available.

### I. In the countries involved in the project

#### 1. In Belgium

**The Belgium Institute for Road Safety** (Institut belge pour la sécurité routière) has realized an important number of tools dealing with road safety.

- Booklets:
  - A vélo comme un pro! (2008)
  - Attachons les enfants en voiture (2009)
  - Avec Thomas, au conseil des chats
  - Carnet de l'élève du set au troisième degré du primaire
  - Carnet de contrôle du vélo
  - Code S (DVD and booklet)

- En route avec les conseils de Mamy Prudence
- En scooter, en mob...Comment rouler sans casse ? (2007)
- Enfants en voiture ? Toujours attachés (2009)
- Fichiers de jeux de circulation
- Jeune, mais pas fou ! Kit de survie-alcool, vitesse, drogues... (2007)
- La parole aux passagers (2007)
- La potion magique de Kazaran (booklet and DVD)
- Le vélo malin et sympa (booklet and exercise book)
- Les astuces du vélo malin et sympa (2009)
- Les enfants à vélo (2009)
- Les signaux routiers présentés aux enfants (booklet and poster)
- Mobilité à tout âge
- Physique et sécurité routière : Quelques applications des lois fondamentales de la physique à la sécurité routière
- Pour ma sécurité, je réfléchis !
- Roulez futés, roulez casqués (2009)
- Set didactique 1er degré primaire (booklet and poster)
- Set didactique 2<sup>e</sup> degré primaire (booklet and calendar)
- Set didactique 3<sup>e</sup> degré primaire (booklet, poster and notebook)
- Sécurité routière sur le chemin de l'école. Conseils aux parents (2006)
- Sûrs ou dangereux ? Exercices de circulation 1 et 2
- Sûrs ou dangereux ? Exercices de circulation 3 et 4
- Sûrs ou dangereux ? Exercices de circulation 5 et 6
- Sûrs ou dangereux ? Exercices de circulation 7 et 8
- Toise « Tatouceinture »
- Tous à vos casques vélos ! (2009)

- Books :

- Olivia et le Tatouceinture (book and poster)
- P'tits Bob et Bobette la sécurité en voiture (2008)
- P'tits Bob et Bobette la sécurité à pied (2008)

- Posters :

- Posters didactiques cyclistes
- Posters didactiques piétons
- Un vélo sûr !

- Game :

- Mobilité !

**The National Office for Childhood** (Office national pour l'enfance) has realized several tools dealing with different kinds of risks among which: sunburns, domestic risks, health, road safety, fires and getting burnt.

- Games:

- Jeu prevention soleil.

This game is a board game is like snakes and ladders game addressed to children and their parents.

The objective is to remind players of sun risks and precautions to take. The player has to answers to questions like "Can you stay in the sun longer if you apply a sun cream product?".

- Le lutin futé

This is a game of co-operation dealing with security at home and in the way to school. The objective of this game is to increase children's awareness of daily risks at home or in their way to school. Children are put in daily life situations where they can be helped by theoretical questions concerning the more common accidents that happen.

- Sur la piste de la santé

It is a board game where information can be shared playfully and parents can show their knowledge on several topics related to health. The players have to answer questions concerning lifestyle, addictions, health care system, diseases, prevention and knowledge of oneself.

- Sécurité au quotidien

This game is about daily life situations in which children from 3 to 6 years old have to recognize hazards and should avoid them. The game is composed by 4 posters showing rooms in a house. The objective is to describe objects and everyday life situations, to recognize the hazards and how they should be avoided.

- Anticata

This is a huge game about security with specific focus on body mastery (equilibrium, knowing ones' capacities and limits). Children have to pass tests on knowledge and know-how.

- Le cuisi-bain

The objective is to identify and circumvent hazards in the kitchen and in bathroom.

- Badaboum et Garatoi

This is a small puppet theatre showing everyday life situations. Some sketches are presented in order to make children interact and suggest what they would do in certain situation.

- Prevento

This board game deals with fire and the dangers of getting burnt. It is for children of all ages. It can be adapted to any specific age of the player.

- Argus et le fantôme de la bouteille

This is comprised of a comic book, drawing boards and a pedagogical file dealing with dangerous products. This game is addressed to children from 4 to 7 years old.

- Boards (boards on which messages and pictures can be attached to):

- L'ONE c'est aussi la prevention

Is a board which has information on the roles of the OME.

- Vive les vacances

This is a board which gives reminders about the precautions to take before going on holidays (sun protection, hydration, nourishment...)

- L'enfant et l'animal

This is a board which deals with dogs' body language.

#### - Booklets

- Un logement sûr

Safety prevention at home should be the concern of everyone: parents, grandparents, caregivers... The objective of this booklet for adults and children is to increase awareness on hazards inside and outside the home.

- Vive les vacances

This booklet gives parents information on safety rules and advices on how to take care of children during the holidays.

#### - Videos

- Badaboum

This video shows the different rooms in a house, and points out the risks and how to react in the event of an accident or emergency.

- L'enfant passager automobile

This video explains how to secure a child in a children's car seat.

- Au coin de la rue, l'enfant piéton

This video deals with pedestrian safety prevention

- Vidéo bambin, sécurité et premiers soins

This video shows the most frequent accidents that happen and what to do.

- La maison piège par piège

This video gives advices on the fire prevention in the home.

#### - CdRom

- Bien vivre avec le soleil

This CdRom is for children from 3 - 5 years old. The contents provide information about the dangers of the sun and advices how to protect children from the sun, games for children.

- CdRom à destination des enfants de 3e maternelle

This CdRom deals with the safety of children in familiar surroundings. There are different situations showing children in danger. Children have to point out the risk situation when playing the game.

- La maison tête en bois

The objective is to give children the possibility to explore in a concrete way the dangers of their environment. They have to identify the risks and to visualize them in order to take precautions and to learn what to do when faced with a risk situation.

- Le domicile d'ange heureux

This game helps children discover different dangers at home.

## **The Youth Organizations**

There are 85 youth organizations registered in French speaking Belgium. They develop projects for youth to help them become Responsible, Active, Critical and United Citizen (CRACS). In this context a lot of associations propose training activities to the coordinators in the prevention field (mainly first-aid actions).

Some of the associations propose some supplementary contents:

- The youth hostels organize evacuation drills
- The youth houses organize prevention activities (health, accidents at home...) and events such as "Carnaval en sécurité" et "Laetare en sécurité".
- The scouts offer a preparedness program for disasters with the aim of making people more aware about the importance of preparing for disasters.

## **2. In Bulgaria**

**The Ministry of Emergency Situations** in cooperation with the Ministry of Education have created several tools:

- A teacher's book including a CD which on Protection in Disasters and Accidents for children at Elementary level.
- Collection of educational materials including a CD version about activities in Disasters, Accidents, Catastrophes and Fires for teachers grade 1-4 and kindergartens.
- The Ministry of Emergency Situations has also developed in cooperation with the United Nations Development Programme a project about "Prevention of disasters and accidents through the system of secondary education in Bulgaria".
- Mission rescuer is an international Art Competition for Children's paintings
- Close to you is a booklet.
- Materials for children available at Ministry of Emergency Situation website:
  - 4 movies for children to know how what to do during an earthquake
  - 1 movie for children with asthma
  - Games and cards for kindergarten
  - Audio and Braille materials for people with disabilities

In every region of Bulgaria there is a place for training simulations of young people. The idea of the Ministry is to create special study rooms in every school.

Other idea to be developed: to focus on child - grand-parent relations when parents are away, to find out how they help each other in different contexts (in the city, in the village, etc.)

## **The Ministry of State Policy for Disasters and Accidents**

- ABC of survival or how should we react on disasters is an information campaign.
- Disasters-important rules for small children
- 10 rules to survive

### **Bulgarian Ministry of Labor and Social Policy**

- Brochure on Economic and social integration of Roma people in Bulgarian Society

### **Republic of Bulgaria Council of Ministers – State service “Civil Protection”**

- Potential natural and technological typical dangers that happen in Sofia city.

### **Municipality of Devnya**

- Strategy for child protection 2004-2006

### **Municipality of Momchildgrad**

- Strategy for developing social services for children and families at risk 2008-2011

### **United Nations Development Programme**

- At Risk: Roma and the displaced in Southern Europe (2006)

### **European Roma Rights Centre**

- Ambulance not on the way. The disgrace of Health Care for Roma in Europe
- Profession prisoner. Roma in detention in Bulgaria (1997)

### **Institute on Sociology at the Bulgarian Academy of Science**

- Social, Economic situation of vulnerable ethnic groups in Bulgaria

### **Institute for market Economics**

- Minority Nationalism in the Balkans: the Bulgarian case

### **Electron Progress Co.**

- In their project „Developing methodologies for creation of plans on how to respond to Disasters and a System for assessment of the critical infrastructure at municipal level”, and they developed a Manual and Instructions to Citizens how to react in the event of a disaster.

### **UNICEF Bulgaria**

- In the frames of the project “Prevention of drop-outs from schools”, 2008 Sociological Study “Reasons for Children Dropping out of Schools in Bulgaria” and a brochure entitled “Drop-outs” for teachers and school directors, a brochure “Drop-outs” for experts
- Sociological study undertaken “Attitude towards the Functioning of a National Hotline for Children and Violence against Children”
- The Climate Change and Children 2007
- Brochure on “The violence between children. What should we know about it?” 2007
- Regional study on education “Education for some more than others?”

### **Institution integration support**

- A manual for teachers, parents and specialists on psychological aid and support for children and teenagers during disaster situations

### **Bulgarian Red Cross**

- Children refugees protection in Bulgaria is a survey conducted by Refugees and Asylum seekers service of the Bulgarian Red Cross
- First-aid
- To eat healthy is a handbook for healthy nutrition for children and there is a manual for teachers developed in collaboration with Kraft Cares

### **3. In France**

#### **Ministère de l'Intérieur**

- Vive la rentrée

This is a booklet for children from 8 - 10 years old and their parents.

The objective is to increase children's awareness of risks in daily life (on their way to school, at school and during playtimes) and to present some safety rules according to different situation (in a car, in a bus, as a pedestrian, at school).

The material is a booklet explaining safety rules, games and information addressed to parents about children's injuries.

- Plus fort que le feu

It is a booklet for children from 8 - 10 years old about housing fire.

The objective is to increase children's awareness of how to react in the case of fire at home and to give some information on how to prevent them.

The material is a booklet explaining safety behaviours, emergency phone numbers, information about the fire spread speed and information to avoid fires.

- Les cahiers de jeux de la sécurité civile

It is a game booklet for children from 6 - 8 years old dealing with everyday risks.

The objective is increase children's awareness of safety behaviours in different everyday situations through the games.

The material is a game booklet showing different risk situations. Children have to find the appropriate safety behaviour.

- Les risques domestiques: que faire en cas d'incendie?, Les risques technologiques : que faire en cas d'accident ?

These are video games for children.

The objective is to increase children's awareness of fire or technological accident.

The material is videogames in three parts.

The first part aims at identifying situation which may be at risk. The second part is in the form of a quiz about the prevention of risks. The questions asked concern information about fire and pictograms used. The third part concerns safety behaviours.

- Le livre “Raconte-moi la sécurité civile”

This small book is well illustrated and shows to children and young people the organisation of the civil protection in France and the men and women who work for it.

- La revue “Risques & Savoirs”

“Risques & Savoirs” is a magazine coproduced by the Ministry of the Interior and the CRDP of Versailles (documentation center of the Ministry of Education) which presents and explains the main risks in the field of civil protection: natural and technological disasters, fires... The issues will follow the theme of “the four elements”: air, fire, water, land. The first issue (august 2009) will deal about air (hurricanes, storms, carbon monoxide, technological disasters...). There will be two issues a year (every six months). The magazine will be completed with a website which will propose a multimedia content (videos and photos).

The magazine is mainly for teachers (in order to help them talking about risks and civil protection) and their pupils but it can also be used to aware the whole population.

## **IFFO-RME**

- Les risques majeurs et moi

It is a booklet addressed to 7th grade children dealing with major risks which has been developed with the support of the French Ministry for Sustainable Development and MACIF Prevention.

The objectives are:

- to define the notion of major risk
- to find and understand the necessary information in order to identify major risks they could be exposed to
- to perceive the different phases of risk and the important role of prevention
- to discover the various stakeholders in crisis management and the crisis management plans organized by the State, the local districts and schools
- to recognize the different warning signals and to apply the instructions

The support material has been developed with the idea that the booklet should allow a personalization of the work. Each student has his own booklet which is based on the experience of the student to differentiate the major risks, the domestic risks and the individual and collective risks. The approach allows understanding the major risks in the immediate environment of the children but also in their town, department, and country and in the world.

There is a website for teachers in order to give them a pedagogical support.

An evaluation has been conducted about the relevance of the topic, the use of the tools in schools, the contents and the website addressed to teachers.

The results of the evaluation by teachers showed that addressing the question of major risks experienced by children is not relevant because if they don't live in an area concerned by major risks they don't feel concerned by the topic. On the other

hand if they have actually experienced a major risk, teachers believe that it may remind children of painful memories.

According to the teachers, this tool could be an opportunity for children to have a citizen action informing their relatives about major risks.

### **Ministère de l'Ecologie - IFFO-RME - IRSN -ANCLI**

- Gafforisk – Radioactivité et Nucléaire

It is a pocket pack of rotating plastic cards, explaining to secondary school children, technological hazard in the nuclear and radiological fields.

Besides the scientific description of these major hazards, some of the cards describe situations in which the student may find himself and the way to react to each of them in order to protect himself.

### **IPAD**

- La maison mini

It is a tool for children aged from 4 - 11 years old about domestic risks.

The objective is to increase children's awareness of risks in the kitchen and bathroom. Children discuss about their knowledge and their capabilities in order to learn how to become autonomous and how they must behave depending on the different risk situations which may or may not have a visible risk. This tool allows children to know their limits and to improve and complete their competencies, so that they know what they are able to do, how to identify a danger or an emergency and be able to protect themselves and to inform about danger.

The material is composed by a magnetic board and vignettes which can be moved on the board according to the situations exposed.

### **Institut des risques majeurs de Grenoble**

- Juliette en alerte

This puppet play for 7 years old children deals with technical and natural risks.

The objective is to increase children's awareness of these risks and to explain what safety behaviours need to be adopted.

The support material of this puppet play is composed by different sketches corresponding to different risks which allow adapting the contents of the play according to the local district where the play is performed.

### **Prévention 2000**

- Memo risk, Le DICRIM Jeune

It is a programme for youths intending to educate children to sustainable development.

The objective is not to explain the risks but assess the level of information and preparedness of the local population.

The youths have to hold an investigation or realise a report, dealing with a major risk in town.

A methodology approach is proposed more than a tool. Several kinds of investigation are proposed:

- A report based on the interview of elderly persons of the town about the disaster they experienced in this town
- A report about the possibility of working in an area liable to flooding based on the interviews of people already working here.
- A map of risks
- A study based on a questionnaire provided by the association.
- Ideas concerning security at school.

The results of the investigation have to be shown to the mayor of the town.

An association for the sustainable development education co-ordinates the project and the work with the town council and the school; a partnership agreement is concluded between them which allow them to involve different members of the community.

### **Centre méditerranéen de l'environnement**

- RIVERMED, RINAMED

These are two European projects aimed respectively at increasing awareness of floods and natural risks in general.

The objectives of the *RIVERMED* tools are:

- to show the complexity of the fight against flood depending on different parameters (physics, humans)
- to present different kinds of land settlement limiting or causing flood
- to present the bad and the good consequences of floods

The objectives of the *RINAMED* tools are to increase public awareness of urbanisation choices which may put in danger the population's lives and goods.

The support material for both is composed by a role play dealing with land settlement, an exhibition explaining the origins of major risks and a CD-ROM which goes into details in the different topics exposed during the exhibition.

### **Météo France, IFFO-RME, Planète science**

- Planète science

This is an internet website for children of 12 years old and their teachers about climate risks.

The objectives of the project are:

- to improve the understanding of the climate phenomenon and the prevention plans
- to think about what part of life choices are responsible in order to limit the damages caused by such events.

The methodology is based on seven steps from the knowledge of hazard to the safety plans and safety behaviours. Activities and experiments are proposed in order to concretise the cognitive inputs.

## **II. In Europe**

### **Cyprus (Cyprus Civil Defense)**

- Be Safe Net

It is a website dealing with natural and man made hazards.

The objective is to provide information and knowledge to groups of people concerning the prevention, preparedness, immediate reaction and rehabilitation in case of danger and disaster. The project aims also at developing a network among countries through the website.

The support material consists of the internet games, cartoons, animations, discussion groups and parallel education. The network should provide a friendly and interactive environment in order to interest and introduce young people to risk prevention, awareness and action in such catastrophic events.

### **Portugal (Lisbon Civil Protection)**

- Tinoni and company

This is a program which has several tools addressed to children from age 5 to 10 years old.

The objective of this program is to raise awareness of the risks that can be found in everyday situations and how to tackle them, in an attempt to contribute to school learning, closely articulating theory and practice. This program also enhances values such as sense of responsibility, mutual respect, solidarity, learning of citizenship.

The material is composed by several tools:

- Tinoni's house
- Discovering how to protect yourself game
- One day with Bruno film
- Tinoni and company television series
- Tinoni&Co CD-Rom

### **Italy (Civil Protection Vallée d'Aoste)**

- Cosa c'è di pericoloso

This is a booklet for the family about daily risks.

The objectives are to increase family awareness about safety culture and to bring about a reduction in children's exposure to risks.

The support material consists of a booklet showing the different everyday life risk situations for children. The booklet should be used as a playful and interactive tool with commentary input from adults.

- Elementi di protezione civile

This is a booklet for families dealing with major risks.

The objective is to create in the community a culture of risk prevention.

The material is composed by a booklet explaining the causes of different risks the role of the civil protection and the safety behaviours. The objective is to discuss about it with the different members of the family.

- Protezione civile in famiglia

This is a booklet addressed for families about major risks.

The objective is to give information about risks and safety behaviours to facilitate the work of the civil protection agency in case of emergency. The families have to feel active and not completely passive.

The support material is divided up into five chapters: information about different kinds of risks and safety behaviours, the importance of being informed about the risks in the local vicinity or during travels, information about family preparedness, information about how to call emergency phone numbers and information regarding how to help disabled persons in case of emergency.

- Si amo la protezione civile, elementi di autoprotezione

This is a colouring book for children about everyday risk situations.

The objective is to help children know the appropriate safety behaviours when faced with danger and to promote the culture of the civil protection.

The support material consists of several colouring boards. One board represents a wrong behaviour and another represents an appropriate behaviour in the same situation.

## **Holland (IMPACT)**

- "Impact- The musical"

It is a musical addressed to primary school children about resilience.

The objective is to increase the resilience of primary school children by helping them learn how to manage their feelings better about existing threats, such as terrorism, disasters or other terrifying events. The first aim is to tell children about the concept of resilience and secondly to familiarise children with skills with which they can increase their own resilience. These skills can help children to adopt a more spirited attitude at the very moment when they are confronted with threatening situations.

The support material consists of a musical piece and complementary teaching material. The musical is about resilience and the various aspects that play a part in it. The piece should be rehearsed and performed by children in the upper classes in primary schools, under the guidance of a teacher. The teaching material consists of both background information on resilience and specific lessons on the subject. The lessons can be used either to prepare for the musical or to go into the subject in more detail.

## Germany (German Red Cross Youth)

- On national level

- Kinder helfen Kindern Children help children

A manual for teachers to teach first aid to elementary school students (grade 1 - 4)

- Heranführung an die Erste Hilfe in der Sekundarstufe Introduction to First Aid for secondary schools

A manual for teachers to teach first aid to students from grade 5

- Regional branch of Baden-Württemberg

- Ich kann helfen/ I can help

A manual for kindergarden and pre-school children to learn first aid. They also offer trainings for child care workers

- Regional branch of Bavaria

- Trau dich!/ Dare it!

A manual and mini-First-Aid-kit to introduce children aged 4 to 7 years (kindergarden and pre-school) to first aid and accident prevention

- Regional branch of Westfalen-Lippe

- Puppe Paul/ Doll Paul

A doll to assist teaching children aged 4 to 7 to first aid and accident prevention. The regional branch also offers training for trainers.

- In several regional branches

- Juniorhelfer/ Junior helpers

They assist school medics and can be younger than 14 years of age. They have to have completed a first-aid training for children. Once they have past 14 years of age they can become a school medic (trained students assume – together with their co-ordinating teachers – first emergency response tasks in schools in the event of accidents, injuries or illness until the emergency medical service arrives).

## **Denmark**

### **(Arbejdsmiljøfondet)**

- Ar and Mi project

This project is an informative website for primary school children. The objective is to teach young children about preventive basic behaviors by achieving simple tasks.

### **(Dansk Center for Undervisningsmiljø)**

- Their website tries to integrate prevention in the school curriculum. In Denmark, a law has been voted including the following principles:
  - All the students have the right to work in a safe and secure place
  - Whatever is taught must not provoke risks
  - Students are to use prevention structures at school
  - Risks related to safety and health are first assessed and then action programs are to be developed

## **Spain (Cruz Roja Juventud- Oficina Central)**

- A program is being put into effect in Andalucia for young people 16-18 years old about prevention of traffic accidents. There is no program addressed to children.

## **Swiss (Bureau de prévention des accidents)**

- Safety Tools

Safety tools are in the form of didactic files in order to help teachers in school safety education. They consist of articles, checklists and graphs on school life topics: mountain sports, hiking, bicycle hiking, ball games, swimming, roller sports, falls, handicrafts, alcohol and accident risks, road safety.

## **United Kingdom (Department of Disaster Management, Government of the Virgin Island)**

- Alex & Jasmine's, Disaster Preparedness Activity Book

This activity book is for children from 3 to 5 years old and their parents and teachers. The activity book consists of games dealing with natural and everyday life risk situations of which the two main characters Alex and Jasmine are depicted. It has been designed to provide practical activities related to basic information on disasters and how to cope with them. A note to parents and teachers encourages them to use the book with the family, at school or in the community.

- Geological hazards, Activity book

This activity book is for children of grade 4, it contains information about geological hazards (landslide, tsunami, earthquakes, volcanoes) and activities related to the information provided.

### III. In the world

#### Asia (Unesco)

- Natural Disaster Preparedness and Education for Sustainable Development

This program has a global and dynamic approach in different countries of Asia in order to increase risk awareness and preparedness of the community through education in primary schools and high schools.

- Planet

One of the tools developed by Asia/Pacific Cultural Centre for Unesco is the production of several teaching-learning multimedia supports. One of them concerns natural disasters. It targets adult learners in a non-formal education programmes, school-attending and out-of-school children, and individuals involved in disaster preparedness education. The objectives are:

- to increase people's understanding of why disasters happen and the nature of disasters
- to raise awareness about the importance of the community's role in disaster preparedness and management
- to encourage people to protect themselves in case of disasters
- to make people capable of planning and preparing to minimize the impact of disasters
- to encourage communities to become more self-reliant

The tool consists of a poster, booklet, animated cartoon video, facilitator's guide, fact sheets, stickers, introduction sheet including adaptation guidelines.

The contents cover the definition of various types of disasters, the causes and effects of disasters, possible actions (preparedness, reduction, response, recovery, reconstruction).

The tool should give some key elements about:

- moving from awareness to action and empowerment
- the role youth has to play
- moving from individual action to collective action

## **Canada (Canadian Red Cross)**

- Expect the unexpected/ Facing fear

The Canadian Red Cross designed Expect the Unexpected™ school prevention programme in 1997, following the major floods in Saguenay, Quebec, in 1996. Intended for educators and parents, it was designed to help youths and their families deal with the impact of disasters and adopt disaster preparedness behaviors.

Expect the Unexpected™ has been developed to carry out the Ministry of Education Learning objectives of every province and territory in Canada. An independent impact analysis of the program implemented by the Institute for Catastrophic Loss Reduction indicates that a significant number of the program participants adopt new prevention behaviours, including preparing an evacuation plan, an emergency kit and/or a three-day supply of water and food for their household.

To meet a demand from Canadian teachers, the Canadian Red Cross developed a new school prevention program that complements Expect the Unexpected™. The Facing Fear™ program is designed to help young people aged 5 to 16 to deal with the aftermath of a terrorist attack or a tragic event by addressing the following topics:

- feelings management;
- the media's role and impact on the development of perceptions;
- international humanitarian law.

The concepts and teaching strategies used in four modules are adapted to the learning characteristics of each age group. Students aged 5-7 will understand their personal feelings following a tragic event; in the second module, the students aged 8-10 look at perceptions and misconceptions; students aged 11-13 will compare and evaluate news stories based on point of view, the use of fact, opinion and bias; and students aged 14-16 will find ways to support each other and deal with their own feelings related to terrorism and other tragic events.

This curriculum's modules complement the lessons in core classroom subjects that teachers are already teaching. This makes it easy for teachers to fit preparedness activities into the regular curriculum without involving extra work.

## **Indonesia**

### **(Belgian Red Cross, Danish Red Cross)**

- These organizations carry out a project in Indonesia aiming at preparing and managing disasters. They work with teachers to diffuse information, they teach children how to behave in emergency situations and they carry out environmental actions like trees planting because of landslides.

## **(Unesco)**

- Folding Photos Kit

This tool has been created in order to increase teenagers' (12-15 years old) awareness and inform them about what they have to do in case of natural disasters. It is composed of pictures and booklets describing different natural disasters

## **Kazakhstan (PNUD Kazakhstan, Ministry of Emergency Situation of the Republic of Kazakhstan, Kazakh Red Cross)**

- Local risk management in Kazakhstan seismic areas

The project aims to strengthen the capacities of local communities to participate in early warning and preparedness for earthquakes, and to equip them with the knowledge and skills required to mitigate against the effects of natural disasters. The project raises the level of awareness of the local population, decision-makers and public on natural, technological and environmental disasters, so that they can better understand the benefits of prevention and preparedness. It also promotes access to information for civil society on disaster response and decision-making.

The activities of this project are:

- Training programmes (brochures with briefings and attachments) to teach students (grades 1-university) what to do in case of earthquake
- Trainings programmes at summer camps, children's village, orphanages, middle and high schools
- Brochures explaining what precautions to take in the event of an earthquake
- Non-fiction educational movies on natural hazards produced in Russian, English and Kazakh about earthquakes, mudslides and floods
- A film about disasters
- An educational cartoon to teach children about what precautions to take in the event of an earthquake. The cartoon is a computer animation available in Russian, Kazakh and English. Books and posters will soon be published using similar cartoon models
- Educational modules for grades 10-11 entitled "Learning to be safe if there is a disaster" which include computer presentations, resource materials and video clips, developed jointly by the UNICEF programme on "Health Care and Life Skills" and the Ministry of Education and Science of the Republic of Kazakhstan
- A training seminar (August 2005) for the instructors at pilot schools in Almaty and South Kazakhstan oblast, as well as for the teachers and trainers of advanced courses in all oblasts of Kazakhstan

## **IV. For information**

Some other programs exist around the world:

### **South Africa**

- Provinces and Municipalities Hail School Contest on Disaster Risk Reduction Knowledge- Chris Hani District Municipality, Eastern Cape Province and the Municipal Disaster Management Centre

### **Central America**

- Facilitating Increased Support for School Building Retrofitting- Sustainable Development Department, Organization of American States

### **Armenia**

- School Students, Teachers, and Principals as Disaster Risk Reduction Trainers - National Survey for Seismic Protection, Armenia and Asian Disaster Reduction Centre

### **Bangladesh**

- The Cyclone Preparedness Programme (CPP) of the Bangladesh Red Crescent Society (BDRCS) was initiated in 1972.
- Adapting Existing Learning Kit on Disaster Risk Reduction to the National Context and Language - ActionAid, Bangladesh and Sustainable Development Resource Centre

### **Cape Verde**

- “Institutionalizing” Disaster Risk Reduction in Schools -National Civil Defence Service

### **Columbia**

- Enforcing Risk Management Plans in School, Developing School Curricula- Directorate for Prevention of and Attention to Emergencies
- Protecting Schools from Earthquakes, Educating Children about Risk- Emergency Prevention and Preparedness Management, Bogota

## **Costa Rica**

- National Education Plan for Risk and Disaster Reduction- National Commission for Risk Prevention and Emergency Response

## **El Salvador**

- Disaster Prevention Included in School Curricula through Youth Project - Plan International, El Salvador and National Civil Defence Service

## **United States of America**

- Red Cross Disaster Education Programme Institutionalized in Nationwide Curriculum - American Red Cross

## **Grenada**

- Teaching Guide and Quiz Competitions Help Enhance Preparedness - National Disaster Management Agency

## **Indonesia**

- Training Teachers in Tsunami-Stricken Aceh Province - Aceh Partnership Foundation and Red Cross Society, Indonesia
- Teaching Disaster Reduction in Primary Schools -Disaster Risk Management in Development Cooperation (a GTZ project), Science and Education Quality Improvement Project and Good Local Governance

## **Iran**

- Annual “Earthquake and Safety” Drills in all Schools across the Country - International Institute of Earthquake Engineering and Seismology
- Alternative Paths to Building the Resilience of School Children - Ministry of Education and UNICEF, Iran

## **Jamaica**

- Protecting School Children through Preparedness and Response Plans- Office of Disaster Preparedness and Emergency Management, the Ministry of Education and Youth and UNICEF, Jamaica

## **Japan**

- Guidance on School Retrofitting, Seismic Resistance Helps Boost School Safety - Ministry of Education, Culture, Sports, Science and Technology

## **Madagascar**

- Disaster Risk Reduction Mainstreamed into School Curricula - National Office for Disaster Risk Management

## **Mali**

- Introducing Disaster Risk Reduction in Classrooms before Mainstreaming it into School Curricula - Ministry of Education, Directorate of Civil Defence, UNDP Mali, Young Business Owner's and Manager's Federation

## **Mozambique**

- Training Teachers to Help Mainstream Disaster Risk Reduction into School Curricula -Red Cross Society, Mozambique

## **Nepal**

- Students and Masons as "Ambassadors" of School Seismic Safety - National Society for Earthquake Technology

## **Peru**

- Influencing Policies to Include Disaster Risk Reduction in National - Education System Intermediate Technology Development Group Management
- A Simple Practical Way to Reduce School Buildings' Seismic Vulnerability- National Institute of Civil Defence and Office for School Infrastructure

## **Philippines**

- Children Assess their Own Vulnerabilities, Plan Risk Reduction - Centre for Disaster Preparedness
- Making School Buildings Safer, Helping Children and Teachers to Reduce Risk- UNICEF, Philippines

## **United Kingdom**

- Using New Media for Disaster Education for and by Youth - Disaster and Development Centre, University of Northumbria

## **Seychelles**

- Developing a Secondary School Manual to Help Integrate Disaster Risk Reduction into Curricula - Department of Risk and Disaster Sierra Leone

- Preparing State Bodies and the Public for Inclusion of Disaster Risk Reduction in School Curricula - Disaster Management Department of the Office of National Security

### **Tanzania**

- Developing a Primary School Manual to Help Reduce Risk - Disaster Management Department

### **Thailand**

- School Children as Disaster Risk Reduction Catalysts and Initiators - Save the Children

### **Vietnam**

- Disaster Preparedness Education for Primary School Teachers and Students - Vietnam Red Cross Society and International Federation of Red Cross and Red Crescent Societies

## Ressources:

<http://www.inspq.qc.ca/formation/default.asp?E=e&type=99&Numero=1564> (8<sup>e</sup> Séminaire francophone international en promotion de la sécurité et en prévention des traumatismes. Promouvoir la sécurité et prévenir les traumatismes des enfants et des jeunes âgés de 0 à 18 ans. 20, 21, et 22 mai 2009 Institut de tourisme et d'hôtellerie du Québec, 3535, rue St-Denis, Montréal, Canada)

<http://www.prevention.ch/accueil.htm>

<http://www.who.int/features/factfiles/roadsafety/fr/index.html> (OMS- Road safety in the world)

[http://www.who.int/features/factfiles/injuries\\_children/fr/index.html](http://www.who.int/features/factfiles/injuries_children/fr/index.html) (OMS - Child injuries - 2008)

[http://www.who.int/features/2008/child\\_injuries/fr/index.html](http://www.who.int/features/2008/child_injuries/fr/index.html) (OMS- Child injuries features- 2008)

[http://www.cyes.info/themes/prevention\\_accidents/accidents\\_presentation.php](http://www.cyes.info/themes/prevention_accidents/accidents_presentation.php) (Accidents prevention - CYES)

<http://www.laprevention.com/prevention/html/prevention/accidentsdom.htm> (Home accidents - laprevention.com)

<http://www.phac-aspc.gc.ca/publicat/cyi-bej/2009/index-fra.php> (Agence de la santé publique du Canada - Etude des blessures chez les enfants et les jeunes - édition 2009)

<http://www.safekidscanada.ca/securijeunescanada/default.asp> (SecuriJeunes)

<http://emergency.cdc.gov/> (Centres for Disease Control and Prevention - Emergency Preparedness and Response)

<http://www.bpa.ch/FRENCH/SICHERHEITINDENSCHULEN/Pages/safetytool.aspx> (BPA - Safety tools - school prevention)

[http://www.bpa.ch/French/ueberuns/Documents/Policy\\_Haus\\_und\\_Freizeit\\_fr.pdf](http://www.bpa.ch/French/ueberuns/Documents/Policy_Haus_und_Freizeit_fr.pdf) (BPA - Sécurité dans l'habitat et les loisirs)

<http://www.lesexpertsdelaprudence.fr/> (prevention against hazards for children - les experts de la prudence)

[http://www.ipad.asso.fr/index\\_fichiers/DOCUMENTATION.htm](http://www.ipad.asso.fr/index_fichiers/DOCUMENTATION.htm) (IPAD)

<http://www.calyxis.fr/> (Calyxis)

<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008DC0130:EN:NOT> (Communication from the Commission to the European Parliament and the Council on reinforcing the Union's disaster response capacity)

<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0082:EN:NOT> (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Community approach on the prevention of natural and man made disasters {SEC(2009)202} {SEC(2009)203})

[http://ec.europa.eu/environment/civil/pdfdocs/stakeholders/potential\\_prevention\\_strategy.pdf](http://ec.europa.eu/environment/civil/pdfdocs/stakeholders/potential_prevention_strategy.pdf) (European Commission DG Environment Assessing the Potential for a Comprehensive Community Strategy for the prevention of Natural and Manmade Disasters Final Report – march 2008)

<http://www.bt.cdc.gov/disasters/foodwater/> (Keep Food and Water Safe after a Disaster)

<http://www.unisdr.org/eng/hfa/docs/final-report-wcdr-french.doc> Hyogo framework

<http://www.cdera.org/> (the Caribbean Disaster Emergency Response Agency)

<http://www.jugendrotkreuz.de/index.php?id=212#c738>

<http://www.jrk-bw.de/200.html>

<http://www.jugendrotkreuz.brk.de/html/jrk-und-schule/traudich.html>

<http://web.pregocms.de/jrk-westfalen/page.php?p=7510&n=945|7507|7510> (German Red Cross)

## In conclusion

Through the first chapter of this document it has been highlighted that the citizen's preparedness at local level is important for several reasons:

- In order to take into account the specific needs of the citizens (particularly children's needs)
- To reinforce the links within the community in the event of a disaster. According to the literary sources, citizens are expected to work together particularly during the response phase. In order to build the necessary trust between citizens so they rely on each other, it is important to reinforce the links within the community between the elder and the younger generations before a disaster occurs.

In reference to the specificity of children's preparedness where children's vulnerability factors are highlighted (among which low level of social support and parental distress), a lot is expected of children from the preparedness phase to the recovery phase. Their needs in particular their needs for protection are not mentioned because too much emphasis has been placed on the children's capacities. There should be a balance between children's capacities – they shouldn't be totally passive either – and their needs – the need to be protected and not to be burdened by too much responsibilities.

The second chapter of this document focuses on children's abilities and also on their vulnerabilities according to their cognitive and emotional development.

Children's risk perceptions and abilities have been analysed. It has been pointed out that their risk perception is linked to the death conceptualisation. The consciousness of danger depends on development stages and thus differs from adults risk perception.

The ability of children to produce a judgement and to be prepared to risks is also linked to the practical experience and from having conceptual information. Children under 12 years old lack these qualities; this is why they are considered as unprepared and vulnerable.

Their emotional development is also a factor which leads to think that in emergency situations children are easily overwhelmed by their emotions and the difficulties of the situation. Additionally children's risk coping is in part due to external factors as social support, parenting and trust.

This is why a model has been made to explain the interactions existing between children and their environment and how children's behaviours regarding risk situations are linked to the educational practices of the adults. It is in this perspective that social family education practices and their impacts on children's risk preparedness have been analysed.

The findings suggest that the interactions between children and adults are necessary concerning children's risk preparedness.

This is why we believe that pedagogical tools should reinforce adults' educational practices taking into account children's abilities but also their vulnerabilities. These

tools should help to develop the psychological and social fundamental skills to be prepared for risks such as trust between the different members of the community.