

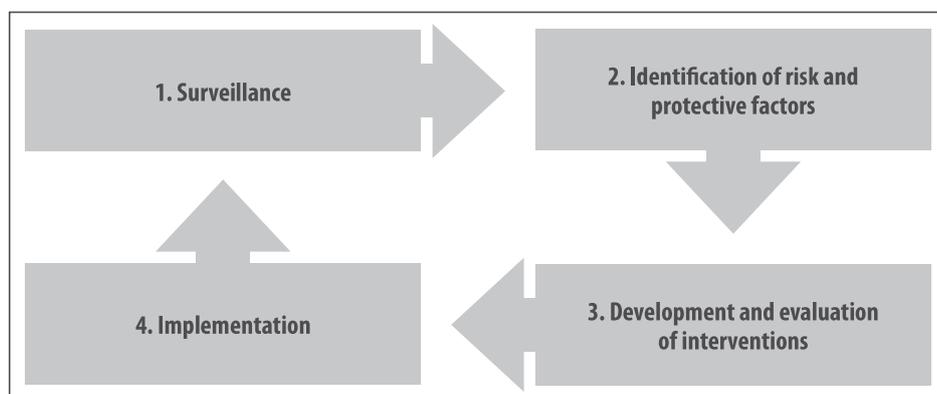
# ANNEX 3

## CONCEPTUAL APPROACHES TO INJURY PREVENTION

### The public health approach

One of the models this report promotes is the public health approach to injury prevention. This is a systematic process following the four logical steps illustrated in Figure 1. The first is surveillance: finding out the extent of the problem, where it occurs and whom it affects. Second, risk factors are identified to understand why a certain group of people is at risk. Step three is to develop and evaluate interventions to find out what works, and step four, the wide implementation of proven strategies (1,2). The advantage of this approach is that it subjects injury prevention to concrete measures involving actors from different agencies and organizations rather than leaving it to chance.

Fig. 1  
The public health approach to preventing injury



### Haddon's matrix

The Haddon matrix fits very well with the public health approach to prevention in which primary prevention corresponds to preventing injuries, secondary prevention to mitigating the effects of exposure to excess energy during the incident and tertiary prevention means providing post-injury care (3,4). This corresponds to the epidemiological triad of human, mechanical and environmental factors that can interact in each phase of the incident. It led to 10 strategies for preventing and controlling injury (Box 1).

The matrix is useful in identifying risk factors and interventions for controlling injury and emphasizes a multisectoral approach to prevention. Recent developments in injury prevention have used this matrix, and interventions have traditionally been considered in terms of the "three E's": (1) engineering and product design or modification; (2) enforcement of legislation and policies; and (3) education of a range of stakeholders including individuals, practitioners, policy-makers and community members. This has since been expanded to include evaluation of programmes, the evidence base and the economics of what works.

#### Box 1 Haddon's 10 strategies for preventing and controlling injury

1. Eliminate the hazard
2. Separate the hazard
3. Isolate the hazard
4. Modify the hazard
5. Equip the child
6. Train and instruct the child or caregiver
7. Warn the child or carer
8. Supervise the child
9. Rescue the child
10. Treat and rehabilitate the child

Source: Haddon (4).

## References

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3. Haddon W. Energy damage and the ten countermeasure strategies. *Journal of Trauma*, 1973, 13:321–331.
4. Haddon W. The basic strategies for preventing damage from hazards of all kinds. *Hazard Prevention*, 1980, 16:8–11.