Injuries and violence

- very day violence and injuries take the lives of more than 14 000 people.
- Globally, more than 5 million people die each year as a result of injuries, resulting from acts of violence against oneself or others, road traffic crashes, burns, drowning, falls, and poisonings, among other causes.
- Injuries account for 9% of the world's deaths, nearly 1.7 times the number of fatalities that result from HIV/AIDS, tuberculosis and malaria combined.
- Globally, of injury-related deaths, 24% are due to road traffic crashes; 16% from suicide; 14% from falls; 10% from homicide; and 7% from drowning. Around 2% of injury-related deaths result from war and conflict.

Injury Definition

Injury is the unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials as heat or oxygen.

Unintentional Injuries

Injuries judged to have occurred without anyone intending that harm be done

E.g., injuries resulting from car crashes, falls, drownings and fires

Intentional Injuries

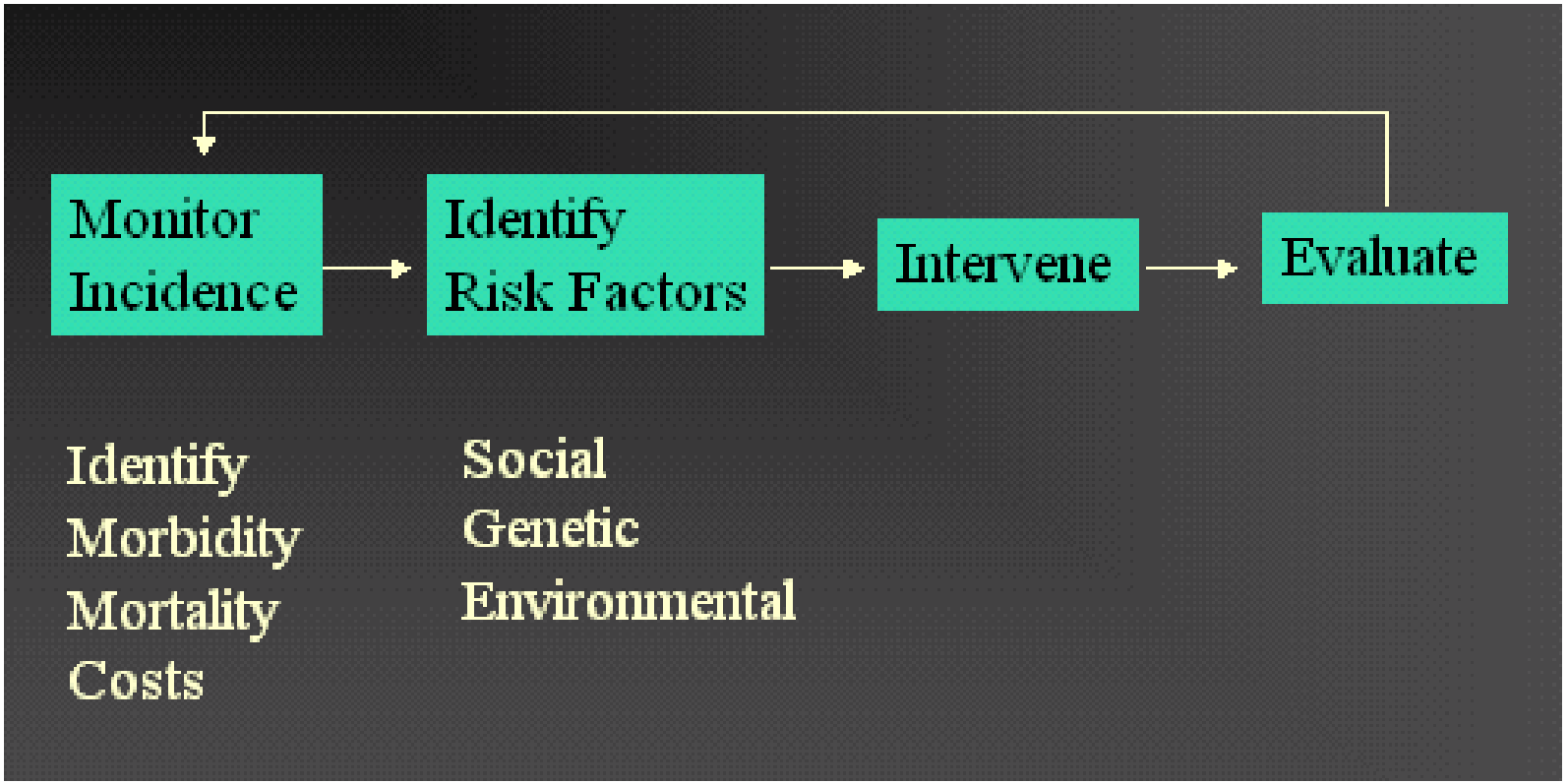
Injuries judged to have been purposely inflicted, either by the self or another person

E.g., assaults, intentional shootings and stabbings, homicides, and suicides

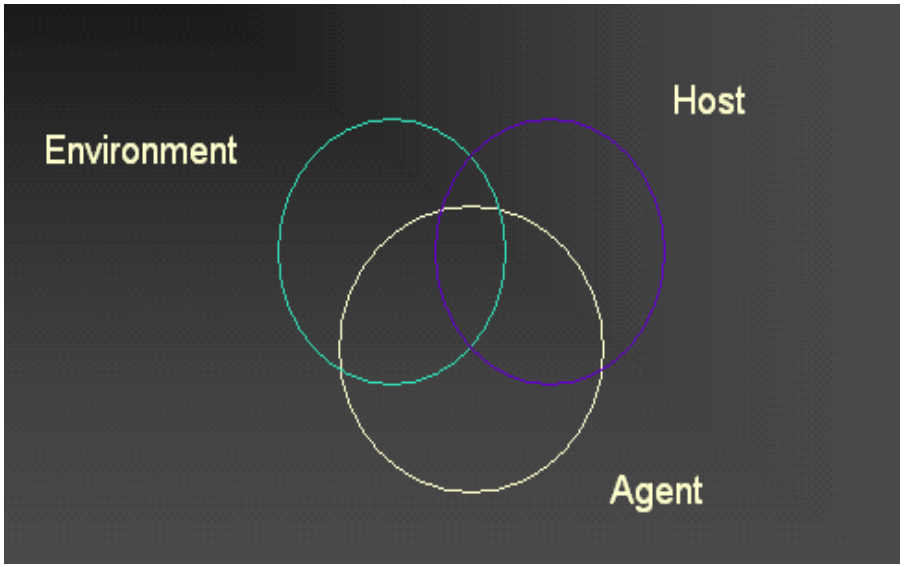
Injury Definition

Injury is the unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials as heat or oxygen.

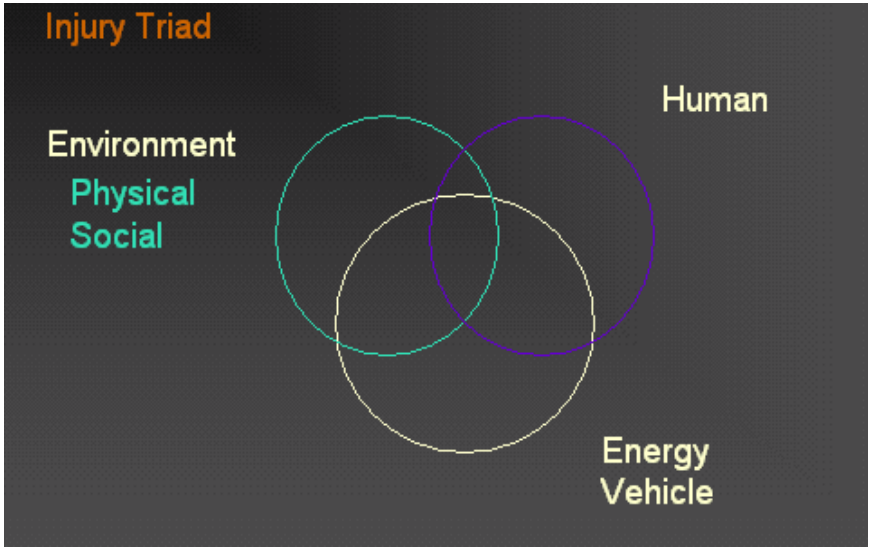
General Model for Injury Control



Epidemiological Model



Injuries and the Factors Underlying Injuries can be Examined from an Epidemiological Framework



Haddon Phase-Factor Matrix

Phase	Host (Human)	Vector (Vehicle)	Physical Environment	Cultural Environment
Pre-Event				
Event				
Post-Event				

Haddon Phase-Factor Matrix

Motor vehicle crash

Phase	Host (Human)	Vector (Vehicle)	Physical Environment	Cultural Environment
Pre-Event	Alcohol Experience Judgment	Brake status Tires	Nigh, Rain Icy road	Acceptance of Drinking and Driving
Event	No seat belt	No air bag	Tree too close to road, No guard rail	Speed limits Enforcement of seat belt
Post-Event	Physical condition	Fuel system integrity Cell Phone	Distance of emergency response	Support for Trauma systems,

STRUCTURE OF RISK ANALYSIS

Injury Control Strategies

1. **Preventing creation of the agent:**

Stop production of the agent before it can present a hazard

Examples:

Highly toxic pesticides

Fireworks

Injury Control Strategies

2. **Reducing the amount of the agent:** identifying a hazard and reducing its presence in an environment.

Ex. Reduce speed limits

Injury Control Strategies

3. **Preventing release of the agent;**
reduce exposure by deterring it
from entering the environment

Ban very speedy cars

Make bathtubs less slippery

Injury Control Strategies–Cont.

4. **Modifying the rate or distribution**

of the agent;

altering the mechanism by which energy is transferred to the host

Adjust the design

Require automobile seatbelts and air bags

Require soft playground surfaces

Injury Control Strategies–Cont.

5. **Separating the host and agent, in time and space**:

eliminating contact between energy source and host

Install pedestrian sidewalks

Reroute high speed traffic around residential neighborhoods or slow it with speed bumps and roundabouts

Spray pesticides at a time of day when people aren't around

use red light cameras

Injury Control Strategies–Cont.

6. Separating the agent from a susceptible host by interposition of a material barrier

Install fences around pools

Install cover guards on dangerous machinery

Install proper guardrails along roads

Use child-proof packaging

Store handguns in a locked metal box

Use extension cords with good insulation

Injury Control Strategies –Continued

7. **Modifying relevant qualities of the agent**

Make crib slat spacing too narrow to strangle a child

- Modify equipment by rounding sharp corners

8. Place a Barrier Between the Hazard and the Potential Victim:

Child-Resistant Caps on Baby Aspirin

Injury Control Strategies – Continued

9. **Strengthening the susceptible host**

Improve physical condition through proper nutrition and regular exercise

Injury Control Strategies – Continued

10. **Countering the injury already caused by the agent**

Provide emergency medical care

Injury Control Strategies –Continued

11. **Stabilizing, repairing and rehabilitating the injured host** .

Provide of appropriate acute care and rehabilitation facilities and make them available all over the country

Proven Injury Prevention Interventions

Car safety belt

Air bags

Motorcycle helmets

Bicycle helmets

Child resistant packaging

Swimming pool fencing

Smoke detectors

Self extinguishing cigarettes

Mantra of Injury Prevention

Education

Transformation

Regulation

Legislation

Litigation.

The 5 “Es” of Incident Prevention

Epidemiology: you can’t prevent it if you don’t understand it. Data collection is key.

Education: awareness, attitudes, cultural beliefs

Enforcement: rules, life safety codes etc.

Engineering: changing the environment to make it safer

Evaluation: did the changes made in education, enforcement, and engineering have the desired outcome on incidence?

Violence

- Globally, nearly one in five girls is sexually abused at least once in their lives.
- Globally, SDG target 16.2 to "end abuse, exploitation, trafficking and all forms of violence against women and torture of children“
- WHO set a global plan of action to address interpersonal violence, in particular against women and girls, and against children.

Gender

- Gender refers to the socially constructed characteristics of women and men – such as the norms, roles and relationships that exist between them.
- Gender expectations vary between cultures and can change over time.
- Gender norms, relations and roles also impact the health outcomes of people.

”Sex” vs. “Gender

- **“**While most people are born either male or female (biological sex), they are taught appropriate behaviours for males and females (gender norms) – including how they should interact with others of the same or opposite sex within households, communities and workplaces (gender relations) and which functions or responsibilities they should assume in society/ gender roles.
- Income, education, age, ethnicity, sexual orientation and place of residence are all important determinants of health.
- When they intersect with gender inequality, they can compound the experience of discrimination, health risks, and lack of access to resources needed for health attainment.

Impact on health

- When individuals do not conform to established gender norms, relations or roles, they often face stigma, discriminatory practices or social exclusion – all of which negatively impact health.
- Gender norms influence access and control over resources needed to attain optimal health, including:
- Economic/ income
- Social/ social networks
- political /leadership, participation
- information and education /health literacy, academic
- time (access to health services); and
- internal /self confidence/esteem

Impact on health

- Gender norms, roles and relations result in differences between men and women in:
- exposure to risk factors or vulnerability;
- household-level investment in nutrition, care and education;
- access to and use of health services;
- experiences in health-care settings; and
- social impacts of ill-health.

Gender equality in health

- Gender equality in health means that women and men, across the life-course and in all their diversity, have the same conditions and opportunities to realize their full rights and potential to be healthy, contribute to health development and benefit from the results.
- Achieving gender equality in health often requires specific measures to mitigate barriers.

Violence against women

- The United Nations defines violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life ".

Intimate partner & Sexual violence

- **Intimate partner violence** refers to behaviour by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviours.
- **Sexual violence** is "any sexual act, attempt to obtain a sexual act, or other act directed against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting/ It includes physically forced rape.

Violence against women

•Violence against women - particularly intimate partner violence and sexual violence - are major public health problems and violations of women's human rights.

•Recent global prevalence figures indicate that about 1 in 3 (35%) of women worldwide have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence in their lifetime.

•Most of this violence is intimate partner violence. Worldwide, almost one third (30%) of women who have been in a relationship report that they have experienced some form of physical and/or sexual violence by their intimate partner.

Violence against women

- Globally, as many as 38% of murders of women are committed by an intimate partner.
- Violence can negatively affect women's physical, mental, sexual and reproductive health, and may increase vulnerability to HIV.
- Factors associated with increased risk of perpetration of violence include low education, child maltreatment or exposure to violence in the family, harmful use of alcohol, attitudes accepting of violence and gender inequality.

Violence against women

- Factors associated with increased risk of experiencing intimate partner and sexual violence include low education, exposure to violence between parents, abuse during childhood, attitudes accepting violence and gender inequality.
- There is evidence from high-income settings that school-based programmes may be effective in preventing relationship violence among young people.

Violence against women

- In low-income settings, primary prevention strategies, such as microfinance combined with gender equality training and community-based initiatives that address gender inequality and relationship skills, hold promise.
- Situations of conflict, post conflict and displacement may exacerbate existing violence, such as by intimate partners, and present additional forms of violence against women.

Risk factors

- Factors associated with intimate partner and sexual violence occur at individual, family, community and wider society levels. Some factors are associated with being a perpetrator of violence, some are associated with experiencing violence and some are associated with both.

Risk factors for both intimate partner and sexual violence include:

- lower levels of education (perpetration of sexual violence and experience of sexual violence);
- exposure to child maltreatment (perpetration and experience);
- witnessing family violence (perpetration and experience);
- antisocial personality disorder (perpetration);
- harmful use of alcohol (perpetration and experience);
- having multiple partners or suspected by their partners of infidelity (perpetration); and
- attitudes that are accepting of violence and gender inequality (perpetration and experience).

Factors specifically associated with intimate partner violence include

- past history of violence;
- marital discord and dissatisfaction;
- difficulties in communicating between partners.

Factors specifically associated with sexual violence perpetration include:

- beliefs in family honour and sexual purity
- ideologies of male sexual entitlement and
- weak legal sanctions for sexual violence.

- The unequal position of women relative to men and the normative use of violence to resolve conflict are strongly associated with both intimate partner violence and non-partner sexual violence.

Health consequences

- Intimate partner and sexual violence have serious short- and long-term physical, mental, sexual and reproductive health problems for survivors and for their children, and lead to high social and economic costs.
- Violence against women can have fatal results like homicide or suicide.
- It can lead to injuries, with 42% of women who experience intimate partner violence reporting an injury as a consequence of this violence.

Health consequences

- Intimate partner violence and sexual violence can lead to unintended pregnancies, induced abortions, gynaecological problems, and sexually transmitted infections, including HIV.
- Women who had been physically or sexually abused were 1.5 times more likely to have a sexually transmitted infection and, in some regions, HIV, compared to women who had not experienced partner violence.
- They are also twice as likely to have an abortion.

Health consequences

- Intimate partner violence in pregnancy also increases the likelihood of miscarriage, stillbirth, pre-term delivery and low birth weight babies.
- These forms of violence can lead to depression, post-traumatic stress disorder, sleep difficulties, eating disorders, emotional distress and suicide attempts.
- Women who have experienced intimate partner violence were almost twice as likely to experience depression and problem drinking. The rate was even higher for women who had experienced non partner sexual violence.

Health consequences

- Health effects can also include headaches, back pain, abdominal pain, fibromyalgia, gastrointestinal disorders, limited mobility and poor overall health.
- Sexual violence, particularly during childhood, can lead to increased smoking, drug and alcohol misuse, and risky sexual behaviours in later life. It is also associated with perpetration of violence (for males) and being a victim of violence (for females).

Impact on children

- Children who grow up in families where there is violence may suffer a range of behavioural and emotional disturbances. These can also be associated with perpetrating or experiencing violence later in life.
- Intimate partner violence has also been associated with higher rates of infant and child mortality and morbidity (e.g. diarrhoeal disease, malnutrition).

Social and economic costs

- The social and economic costs of intimate partner and sexual violence are enormous and have ripple effects throughout society. Women may suffer isolation, inability to work, loss of wages, lack of participation in regular activities and limited ability to care for themselves and their children.

Prevention and response

- Currently, there are few interventions whose effectiveness has been proven through well designed studies. More resources are needed to strengthen the prevention of intimate partner and sexual violence, including primary prevention, i.e. stopping it from happening in the first place.
- Regarding primary prevention, there is some evidence from high-income countries that school-based programmes to prevent violence
- In resource-poor settings….several primary prevention strategies: those that combine microfinance with gender equality training; that promote communication and relationship skills within couples and communities; that reduce access to, and harmful use of alcohol; and that change cultural gender norms, have shown some promise but need to be evaluated further.

Prevention and response

- To achieve lasting change, it is important to enforce legislation and develop policies that:
- address discrimination against women;
- promote gender equality;
- support women; and
- help to move towards more peaceful cultural norms.
- An appropriate response from the health sector can play an important role in the prevention of violence.
- Sensitization and education of health and other service providers is an important strategy.
- To address fully the consequences of violence and the needs of victims/survivors requires a multi-sectoral response.

WHO actions

- building the evidence base on the size and nature of violence against women in different settings and supporting countries' efforts to document and measure this violence and its consequences. This is central to understanding the magnitude and nature of the problem at a global level and to initiating action in various countries
- strengthening research and research capacity to assess interventions to address partner violence
- developing technical guidance for evidence-based intimate partner and sexual violence prevention and for strengthening the health sector responses to such violence;
- disseminating information and supporting national efforts to advance women's health and rights and the prevention of and response to violence against women;
- supporting countries’ to strengthen the health sector response to violence against women, including the implementation of WHO tools and guidelines; and
- collaborating with international agencies and organizations to reduce/eliminate violence globally.

Child maltreatment

Child maltreatment, sometimes referred to as child abuse and neglect, includes all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that results in actual or potential harm to the child's health, development or dignity. Within this broad definition, five subtypes can be distinguished – physical abuse; sexual abuse; neglect and negligent treatment; emotional abuse; and exploitation.

Child maltreatment

- Globally, approximately 20% of women and 5–10% of men report being sexually abused as children, while 25–50% of all children report being physically abused. The lifelong consequences of child maltreatment include impaired physical and mental health, poorer school performance, and job and relationship difficulties. Ultimately, child maltreatment can contribute to slowing a country's economic and social development.

Child maltreatment

- Child maltreatment is a global problem with serious life-long consequences. In spite of recent national surveys in several low- and middle-income countries, data from many countries are still lacking.
- Child maltreatment is complex and difficult to study. Current estimates vary widely depending on the country and the method of research used. Estimates depend on:
- the definitions of child maltreatment used;
- the type of child maltreatment studied;
- the coverage and quality of official statistics;
- the coverage and quality of surveys that request self-reports from victims, parents or caregivers.

Scope of the problem

- International studies reveal that a quarter of all adults report having been physically abused as children and 1 in 5 women and 1 in 13 men report having been sexually abused as a child. Additionally, many children are subject to emotional abuse (sometimes referred to as psychological abuse) and to neglect.
- Every year, there are an estimated 41 000 homicide deaths in children under 15 years of age. This number underestimates the true extent of the problem, as a significant proportion of deaths due to child maltreatment are incorrectly attributed to falls, burns, drowning and other causes.
- In armed conflict and refugee settings, girls are particularly vulnerable to sexual violence, exploitation and abuse by combatants, security forces, members of their communities, aid workers and others.

Consequences of maltreatment

- Child maltreatment causes suffering to children and families and can have long-term consequences. Maltreatment causes stress that is associated with disruption in early brain development. Extreme stress can impair the development of the nervous and immune systems. Consequently, as adults, maltreated children are at increased risk for behavioural, physical and mental health problems.

maltreated children are at increased risk for behavioural, physical and mental health problems such as

- perpetrating or being a victim of violence
- depression
- smoking
- obesity
- high-risk sexual behaviours
- unintended pregnancy
- alcohol and drug misuse.
- Via these behavioural and mental health consequences, maltreatment can contribute to heart disease, cancer, suicide and sexually transmitted infections.
- Beyond the health and social consequences of child maltreatment, there is an economic impact, including costs of hospitalization, mental health treatment, child welfare, and longer-term health costs.

Risk factors

- A number of risk factors for child maltreatment have been identified. These risk factors are not present in all social and cultural contexts, but provide an overview when attempting to understand the causes of child maltreatment.

Child

- It is important to emphasize that children are the victims and are never to blame for maltreatment. A number of characteristics of an individual child may increase the likelihood of being maltreated:
- being either under four years old or an adolescent
- being unwanted, or failing to fulfil the expectations of parents
- having special needs, crying persistently or having abnormal physical features.

Parent or caregiver

A number of characteristics of a parent or caregiver may increase the risk of child maltreatment. These include:

difficulty bonding with a newborn

not nurturing the child

having been maltreated themselves as a child

lacking awareness of child development or having unrealistic expectations

misusing alcohol or drugs, including during pregnancy

being involved in criminal activity

experiencing financial difficulties.

Relationship

A number of characteristics of relationships within families or among intimate partners, friends and peers may increase the risk of child maltreatment. These include:

physical, developmental or mental health problems of a family member

family breakdown or violence between other family members

being isolated in the community or lacking a support network

a breakdown of support in child rearing from the extended family.

Community and societal factors

gender and social inequality;

lack of adequate housing or services to support families

high levels of unemployment or poverty;

the easy availability of alcohol and drugs;

inadequate policies and programmes to prevent child maltreatment, child pornography, child prostitution and child labour;

social and cultural norms that promote or glorify violence towards others, demand rigid gender roles, or diminish the status of the child in parent–child relationships;

social, economic, health and education policies that lead to poor living standards, or to socioeconomic inequality or instability.

Types of Child maltreatment

There are two distinct types of violence experienced by children (defined by the United Nations as anyone aged 0-18 years) - child maltreatment by parents and caregivers in children aged 0-14, and violence occurring in community settings among adolescents aged 15-18 years. These different types of violence can be prevented by addressing the underlying causes and risk factors specific to each type.

Child maltreatment by parents and caregivers can be prevented by:

reducing unintended pregnancies;

reducing harmful levels of alcohol and illicit drug use during pregnancy;

reducing harmful levels of alcohol and illicit drug use by new parents;

improving access to high quality pre- and post-natal services;

providing home visitation services by professional nurses and social workers to families where children are at high-risk of maltreatment;

providing training for parents on child development, non-violent discipline and problem-solving skills.

Violence involving children in community settings can be prevented through:

pre-school enrichment programmes to give young children an educational head start;

life skills training;

assisting high-risk adolescents to complete schooling;

reducing alcohol availability through the enactment and enforcement of liquor licensing laws, taxation and pricing;

restricting access to firearms.