### 7. INJURY/VIOLENCE PREVENTION

#### Goal

To reduce among all Kentuckians the incidence and severity of injuries from unintentional causes, as well as death and disabilities due to violence.

## **Terminology**

**Age-adjusted injury rate:** An injury rate calculated to reflect a standard age distribution.

**Attempted rape** (according to the National Crime Victimization Survey): Includes males and females; both heterosexual and homosexual rape. Includes verbal threats of rape.

Child Fatality Review Teams: Teams which use routine, systematic, multiagency, and interdisciplinary processes to review deaths due to external causes and make recommendations for prevention.

**Domestic elder abuse:** Abuse of persons aged 60 and older; living in their own homes or homes of caregivers. (Definition according to the Administration on Aging)

**Graduated licensing laws**: Require young drivers to "graduate" through phases of restricted driving before they are allowed to get their unrestricted licenses. Such restrictions include a mandatory supervised driving period, night driving curfews, limits on teen passengers riding with a beginning driver, and a lower blood alcohol content level for teens than for adults.

**Homicide:** Fatal injury caused intentionally by another human being. (Note: When using information provided by the National Center for Health Statistics or the Federal Bureau of Investigation, the user should refer to the specific wording used by each source.)

Impaired driving: Drunk or drugged driving.

**Injury:** 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.

**Intimate Partner Violence (IPV):** Actual or threatened physical or sexual violence, or psychological/emotional abuse by an intimate partner.

**Intimate Partner(s):** Intimate relationships include spouses, ex-spouses, boyfriends, girlfriends, and former boyfriends and girlfriends (includes same-sex partners).

**Motorcyclist**: Includes both operators and riders of motorcycles.

**Pedalcyclists**: Riders of bicycles and tricycles.

**Prevalence:** Total number of cases in a designated period.

**Primary enforcement**: A stipulation of a safety belt use law that allows law enforcement officials to stop a driver solely on the basis of a safety belt law violation.

**Rape** (according to the National Crime Victimization Survey): Forced sexual intercourse including both psychological coercion as well as physical force. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s). Includes incidents of penetration from a foreign object.

**Risk factor:** A characteristic that has been demonstrated statistically to be associated with a particular injury.

**Secondary enforcement**: A stipulation of a safety belt use law that allows law enforcement officials to address a safety belt use law violation only after a driver has been stopped for some other purpose.

**Sexual assault** (according to the National Crime Victimization Survey) A wide range of victimizations which are separate from rape and attempted rape. Includes attacks or attempted attacks of unwanted sexual contact between the victim and the offender that may or may not involve force and includes grabbing or fondling. Verbal threats are also included

**Target population**: The group of persons (usually those at high risk) that program interventions are designed to reach.

**Trauma registry**: A collection of data on patients who receive hospital care for certain types of injuries (e.g., blunt or penetrating trauma or burns). Such collections are designed primarily to ensure quality trauma care process and outcomes in individual institutions and trauma systems but have the secondary purpose of providing useful data for the surveillance of injury morbidity and mortality.

**Unintentional injury**: A type of injury that occurs without purposeful intent.

**Vehicle Miles Traveled** (VMT): The miles of travel by all types of motor vehicles as determined by the states on the basis of actual traffic counts and established estimating procedures.

**Violence:** An act carried out with the intention or perceived intention of causing physical pain or injury to another person.

**Vulnerable populations**: Refers to persons with disabilities and elder abuse victims.

**Years of potential life lost** (YPLL): A statistical measure used to enumerate premature death; YPLL is calculated by subtracting an individual's age at death from a predetermined life expectancy. The Centers for Disease Control and Prevention generally uses 75 years of age for this purpose (e.g., a person who died at age 35 would have YPLL of 40).

#### **Overview**

Between 1993 and 1997, an average of 2,437 deaths per year among Kentucky residents were due to injuries. These injury deaths resulted from a variety of causes such as motor vehicle crashes, firearms, suicide, homicide, poisonings, suffocation, falls, fires, and drownings. This translates into about 7 people who die from injuries each day, with one of these being a child. One death out of every 15 in Kentucky results from injury. Injury death rates for Kentucky were higher than the U.S. for each of the years between 1993 and 1997 by an average of 9 percent. Of these deaths, 66 percent were classified as unintentional and 32 percent as intentional. Unintentional injury deaths included a yearly average of 795 resulting from motor vehicle crashes. Of the yearly average 751 intentional injury deaths, 502 were classified as suicide and 249 as homicide.

For ages 1 to 44, deaths from injuries far surpass those from cancer, the overall leading natural cause of death at these ages, by about 3 to 1. For ages 1 through 4, injuries cause more than 2 out of 5 (43 percent) deaths and result in four times the number of deaths from congenital anomalies, the second leading cause. For ages 15 to 24, injury deaths exceed deaths from all other causes combined from age 5 through 44. For ages 15-24, they are the cause of nearly 4 out of 5 deaths. Deaths resulting from injury are one of the most profound public health issues facing children in Kentucky today. In 1996, 728 children 18 years of age and younger died from injury, 30 percent from violence and 70 percent from unintentional injury. After age 44, injuries account for fewer deaths than other health problems, such as heart disease, cancer, and stroke. However, despite the decrease in the proportion of deaths due to injury, the death rate from injuries is actually higher among older people than among younger people.

The risk of injury is so great that most people sustain a significant injury at some time during their lives. Nevertheless, this widespread human damage too often is taken for granted, in the erroneous belief that injuries happen by chance and are the result of unpreventable "accidents." Injuries are not, as we used to think, "accidents," or random, uncontrollable acts of fate. Rather, injuries are predictable and preventable.

Preventing injuries costs far less than treating them. For example:

• Every child safety seat saves this country \$85 in direct medical costs and an additional \$1,275 in other costs to society.

- Every bicycle helmet saves this country \$395 in direct medical costs and other costs to society.
- Every smoke detector saves this country \$35 in direct medical costs and an additional \$865 in other costs to society.
- Every dollar spent on poison control centers saves this country \$6.50 in medical costs.

Motor vehicle crashes cause 44 percent of all spinal cord injuries. Among a majority of pedalcyclists killed, the most serious injuries are head injuries. The common cause of death in motorcyclists is due to catastrophic head injury. Death rates from head injuries have been shown to be twice as high among cyclists in states with no helmet laws or laws that apply only to young riders, compared with states where laws apply to all riders. Falls account for 87 percent of all fractures among people aged 65 years and older and are the second leading cause of spinal cord and brain injury. Head injuries are associated with the majority of deaths and severe injuries resulting from falls among children. Falls account for 90 percent of the most severe playground-related injuries (mostly head injuries and fractures) and one-third of fatalities. Head injuries are involved in 75 percent of all fall-related deaths associated with playground equipment. Many diving-related incidents also result in spinal cord injury.

Falls are the second leading cause of injury deaths among people aged 65 to 84 and the leading cause for people aged 85 and older. In 1996, 8,500 people over 65 died as a result of falls. Falls are the most common cause of injuries and hospital admissions for trauma among the elderly. Falls account for 87 percent of all fractures among people aged 65 years and older and are the second leading cause of spinal cord and brain injury. Since most fractures are the result of falls, understanding factors that contribute to falling is essential in order to design effective intervention strategies. For people aged 65 years and older, 60 percent of fatal falls occur in the home, 30 percent occur in public places, and 10 percent occur in health care institutions.

The most serious fall-related injury is hip fracture. Approximately 240,000 hip fractures occur each year in the United States among people older than 50 years; 75 to 80 percent of all hip fractures are sustained by women. The impact of these injuries on the quality of life is enormous. Half of all elderly adults hospitalized for hip fracture cannot return home or live independently after the fracture. The annual cost for treating these injuries nationally was over \$3 billion in 1986. Factors that contribute to falls include dementia, visual impairment, neurologic and musculoskeletal disabilities, psychoactive medications, and difficulties in gait and balance. Environmental hazards such as slippery surfaces, uneven floors, poor lighting, loose rugs, unstable furniture, and objects on floors also may play a role.

Violence is pervasive in our society and has the potential to change the quality of life. Americans are shocked by reports of children killing other children in schools, and parents are concerned about the safety of their children at school. Reports of gang violence even in smaller towns and rural areas make people fearful for their safety and their families. An increase in suicide among young people and the elderly raises

concerns about the vulnerability of people in these age groups. Intimate partner violence and sexual assault threaten women in all walks of life. Violence claims the lives of many of our Nation's young people and threatens the health and well being of many Americans. The pervasiveness of violence and the fear it causes have rapidly changed the quality of life in America. In an average month in Kentucky, 21 people die from homicide, a minimum of 2,520 people survive interpersonal assaults (an estimate based on the National Victimization Survey), 42 people commit suicide, and as many as 400 people attempt suicide. Please see the Mental Health and Mental Disorders focus area of this document for the suicide objectives and further discussion.

Important findings in the 1996 "Child Maltreatment Report From the States to the National Child Abuse and Neglect Data System" were: (1) since 1990, nearly 1 million children were victims of substantiated or suspected child abuse and neglect, which is an approximate 18 percent increase; (2) the national rate of victimization was 15 victims per 1,000 in the population; (3) there were an estimated 1,077 fatalities due to child maltreatment in the 50 states and the District of Columbia. Finally, the findings regarding the types of maltreatment were (a) 52 percent suffered neglect; (b) 24 percent physical abuse; (c) 12 percent sexual abuse; (d) 6 percent emotional abuse; and (e) 3 percent medical neglect. The Report also highlights that almost two-thirds of reports were from professional sources - education, social services, law enforcement, and medicine. The national rate of children who were reported was 44 per 1,000 children in the population. Seventy-seven percent of perpetrators of child maltreatment were parents, and an additional 11 percent were other relatives of the victim.

Poverty, discrimination, and lack of education and employment opportunities are important risk factors for violence and must be addressed as part of any comprehensive solution to the epidemic of violence. Strategies for reducing violence should begin early in life, before violent beliefs and behavioral patterns can be adopted.

There are many similarities between the problem of child maltreatment and maltreatment of elders. Some of the similarities include maltreatment by persons known to the victim, especially family members; the types of maltreatment include the same types of abuse and neglect, and both can be considered vulnerable populations. Barriers to progress in both groups include vague and inconsistent definitions of abuse; lack of clarity regarding differentiation between abuse and neglect; limited sources of data; and unfamiliarity with reporting cases of maltreatment. Findings from recent reports further highlight the similarities between the two groups. It has also been cited in "Violence in America - Domestic Violence Against the Elderly" that the "findings from the study of child and spouse abuse may shed light

In 1995, almost 5,000 girls and women in the United States were murdered. In those cases for which the FBI has data on the relationship between the offender and the victim, 85 percent were killed by someone they knew. Nearly half of the women who knew the perpetrators were murdered by a husband, ex-husband, or boyfriend. In 1994, more than 500,000 women were seen in hospital emergency departments for violence-related injuries and 37 percent of those women were there for injuries inflicted by spouses, ex-

spouses, or nonmarital partners. Although most assault victims survive, they suffer physically and emotionally.

A minimum of 16 percent of American couples experienced an assault by at least on eof the partners during the year they were surveyed, and about 40 percent of these assaults involved severe violence, such as kicking, biting, punching, choking, and attacking with weapons. Nearly one out of eight of the husbands had carried out one or more acts of physical aggression against his wife during the 12 months preceding questioning. Men who are physically violent toward their partners are more likely to be sexually violent toward them and are more likely to use violence toward children. The perpetration of intimate partner violence is most common in adults who, as children or adolescents, witnessed intimate partner violence or became the targets of violence from their caregivers.<sup>1</sup>

The 1994 National Crime Victimization Survey (NCVS) reports that 407,190 females aged 12 and over were victims of rape, attempted rape, or sexual assault. Other surveys conducted in the past decade indicated that the NCVS underestimates the problem. For example, the National Women's Study in conjunction with estimates based on the U.S. Census suggest that 12.1 million American women have been victims of forcible rape sometime in their lives. According to this study, 0.7 percent, approximately 683,000, adult American women experienced a forcible rape in the last year.

Because of the nature of intimate partner violence and sexual violence, the problems are difficult to study. Consequently, much remains unknown about the factors that increase or decrease the likelihood that men will behave violently towards women, the factors that endanger or protect women from violence, and the physical and emotional consequences of such violence for women and their children.

The public health approach to violence is multidisciplinary and enlists many strategies and approaches for dealing with violence. Kentuckians need to believe that violence can be prevented. Much has been learned about the impact of violence and the burden it imposes on society. Additionally, there are many potentially effective intervention strategies such as parent training, mentoring, home visitation, and social-cognitive curricula for violence prevention. Ongoing evaluation of programs will help identify effective approaches for violence prevention. Public health provides leadership in an effort to facilitate a multifaceted approach by integrating scientific disciplines, organizations, and communities to work together to find solutions to violence in Kentucky.

## Progress Toward Year 2000 Objectives

Kentucky appears to be falling short in progress toward achieving Year 2000 objectives. Based on 1995-97 average data, the unintentional injury death rate was 38.1 per 100,000 was considerably higher than the 34/100,000 rate that was set as the Year 2000 objective. Year 2000 objectives for specific types of unintentional injuries are not being achieved.

For example, motor vehicle-related deaths are 21.1/100,000 while Year2000 target was 18.6/100,000. Deaths from falls are 3.5/100,000 as compared with the target 2.3/100,000. Deaths from drowning and residential fires are considerably higher than the objectives.

The objectives in the area of unintentional injuries focus on a wide range of epidemiologic, legislative, and educational means to reduce the occurrence of these events. There are few bright spots. With respect to objectives related to motor vehicle-related injuries, the objective for children has been achieved. This is probably a result of the extensive efforts that have been made to increase the correct use of child safety seats. Much of the progress at the National level for meeting the Year 2000 unintentional injury objectives has been in areas related to motor vehicle fatalities and use of vehicle occupant restraints. Kentucky does not show this same progress. For people aged 70 or greater the motor vehicle death rate has not been reduced since 1990 (31.1/100,000).

Of the 8 violent and abusive behavior objectives in *Healthy Kentuckians 2000*, several have surpassed their Year 2000 targets: public awareness, child death review systems, and medical protocols in emergency departments. However, it should be noted that the *Healthy Kentuckians 2000* objectives are not as extensive as the national *Healthy People 2000* objectives. This is because Kentucky still does not have a comprehensive data system to measure numerous specific objectives. Six objectives that have progressed most toward the Year 2000 targets are: reducing suicides; reducing firearm-related deaths; reducing physical fighting and weapon-carrying among adolescents aged 14-17; increasing the proportion of elementary and secondary schools that teach nonviolent conflict resolution skills, preferably as part of comprehensive school health education; and enacting laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors were not part of the *Healthy Kentuckians 2000* objectives.

While the lack of progress towards some of the Year 2000 targets is disturbing, there are many reasons contributing to these results. Youth continue to be involved as both perpetrators and victims of violence. Women, and often their children, continue to be the targets of both physical and sexual assault frequently perpetrated by individuals known to them, specifically the women's current and former intimate partners. Other, more general issues include the lack of comparable data sources, definitional issues, and the lack of resources to adequately establish consistent tracking systems.

## 2010 Objectives

Injuries that Cut Across Intent

Head and Spinal cord Injuries

7.1. Reduce to 65 per 100,000 the rate of nonfatal head injuries. Baseline: 76 per 100,000 in 1996, as measured by hospitalization.

Select Populations	1996
Males, Ages 15 - 24	134/100,000
People aged 75 and older	207/100,000

**Target Setting Method**: 15 percent improvement over baseline.

**Data Source**: Kentucky Hospital Discharge Database (UB92)

#### **Implementation Strategy:**

- Encourage passage of state laws that require all motorcyclists and bicyclists to wear helmets.
- Encourage passage of state laws that required drivers and automobile occupants to be restrained by safety belts or child safety restraints.
- Encourage dissemination and implementation of the National Action Plan for Playground Safety.
- Promote use of protective gear in sports events.

#### 7.2. Reduce to 4 per 100,000 the rate of nonfatal spinal cord injuries.

**Baseline:** 5 per 100,000 in 1996, as measured by hospitalization.

**Target Setting Method:** 15 percent improvement over baseline.

**Data Source**: Kentucky Hospital Discharge Database (UB92)

#### **Implementation Strategy:**

• Prevention efforts should target motor vehicle crashes, falls, firearm injury, diving, and water safety.

#### Firearm-Related Injuries

#### 7.3 Reduce firearm-related deaths to less than 12 per 100,000.

**Baseline:** 14 per 100,000 in 1996; age-adjusted to Year 2000.

Select Populations	<u>1993-1997 Average</u>
Homicides	4.5/100,000
Suicides	9.7/100,000
Unintentional	0.8/100,000
African American	22.4/100,000
White	14.5/100,000

**Target Setting Method**: 15 percent improvement over baseline.

**Data Source**: Kentucky death certificates (1993-1997 average)

#### **Implementation Strategy:**

- Pass laws that require the use of trigger locks
- Promote gun and ammunition safe storage.
- Make parents or caregivers responsible if children use firearms to harm others.

#### Child Fatality Review

7.4. (Developmental) Extend multi-agency, multidisciplinary case review of all unexpected child fatalities (Coroners' cases) among children less than 18 years to all 120 counties.

Target Setting Method: Total coverage.

**Potential Data Sources:** Vital Statistics death certificates, Coroner's Report forms, Annual State Child Fatality Review System reports.

#### **Implementation Strategy:**

The goals of Child Fatality Review teams are to determine accurately the cause of death and determine whether or not death was preventable.

#### Poisonings

7.5 Reduce deaths caused by poisoning to no more than 3.0 per 100,000.

**Baseline:** 3.6 per 100,000 in 1996; age-adjusted to year 2000.

**Target Setting Method**: 15 percent improvement over baseline.

Data Source: Kentucky death certificates

- Have the poison control center phone number in a prominent place in all homes.
- Install a carbon monoxide alarm in all residential buildings.
- Educate parents and caregivers to store medications and toxic chemicals properly out of reach of children.

#### Suffocation

7.6. Reduce deaths caused by suffocation to 2 per 100,000.

Baseline: age-adjusted 3 per 100,000 in 1996.

**Target Setting Method**: 25 percent improvement over baseline.

Data Source: Kentucky death certificates

7.7. (Developmental) Extend the collection of Uniform Hospital data to include emergency departments.

Target Setting Method: Complete coverage.

Potential Data Source: Uniform Emergency Department (ED) Visits (UB-92ED)

#### **Implementation Strategy:**

- Use hospitals to voluntarily provide UB-92 ED records for analysis.
- Introduce statutory change to require reporting of ED data.

Unintentional Injuries

7.8. Reduce deaths caused by unintentional injuries to no more than 31 per 100,000 people.

**Baseline:** 36 per 100,000 in 1996; age-adjusted to year 2000.

**Target Setting Method**: 15 percent improvement over baseline.

**Data Source**: Kentucky death certificates

#### **Implementation Strategy:**

- Raise awareness that injuries are not "accidents", and that they can be prevented by behavioral and environmental changes.
- Support the development and implementation of injury prevention programs that target populations most affected by specific types of injuries.
- Emphasize the substantial risk posed by alcohol for all unintentional injuries.
- Support surveillance efforts to characterize those at risk and develop prevention programs.
- 7.9 (Developmental) Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 641 per 100,000.

**Target Setting Method:** 15 percent improvement over baseline

Potential Data Source: Kentucky Uniform Hospital Discharge Data (UB92)

**Implementation Strategy**: Same as for Objective 7.8.

Motor Vehicle-Related Injuries

# 7.10. Reduce deaths caused by motor vehicle crashes to no more than 12 per 100,000 and 1 per 100 million vehicle miles traveled.

**Baseline:** 17 per 100,000 in 1996 and 2 per 100 million VMT in 1997.

<b>Select Populations</b>	<u>1996</u>
Children 14 and under	5
Aged 15-24	29
Aged 70 and older	24
Motorcyclists per 100 million	n 22
VMT	

**Target Setting Method**: 28 percent improvement over baseline.

Data Sources: Kentucky death certificates

#### **Implementation Strategy:**

- Promote passage of primary enforcement safety belt laws which will include trucks and sports utility vehicles.
- Promote passage of universal helmet laws.
- Increase support to programs that promote the use of safety belts and child restraints.
- Promote extension of Graduated Driver Licensing Program restrictions for the provisional driver stage from six months to one year.
- Establish data linkages between police and hospital records and other non-fatal injury records to enhance early detection of shifts in trends and better understand the medical costs associated with motor vehicle crashes.

#### 7.11. Reduce pedestrian deaths on public roads to no more than 1 per 100,000.

**Baseline:** 2 per 100,000 in 1997 (4 per 100,000 age 70 and older in 1996).

**Target Setting Method**: 50 percent improvement over baseline.

**Data Source**: Kentucky death certificates

#### **Implementation Strategy:**

• Promote the need for safe pedestrian walkways.

• Target senior citizen areas for special walkways.

# 7.12. Reduce nonfatal injuries caused by motor vehicles crashes to 1000 per 100,000.

**Baseline:** 1,270 per 100,000 in 1997.

Select Populations	<u> 1997</u>
Aged 16-20	1,328
Aged 21-24	1,460

**Target Setting Method**: 21 percent improvement over baseline.

**Data Source**: Kentucky Hospital Discharge Database (UB-92)

**Implementation Strategy:** Same as Objective 7.10.

7.13. Increase use of safety belts to 93 percent of motor vehicle occupants.

**Baseline:** 69 percent in 1997.

**Target Setting Method**: 33 percent improvement over baseline.

**Data Sources**: Kentucky Transportation Center

#### **Implementation Strategy:**

• Encourage the passage of a primary seat belt law.

• Develop, implement, and evaluate intervention programs for promoting highway safety education.

# 7.14. Increase use of child restraints to 93 percent of motor vehicle occupants ages 4 years and younger.

**Baseline:** 61 percent in 1997

**Target Setting Method**: 52 percent improvement over baseline.

**Data Sources**: Kentucky Transportation Center

#### **Implementation Strategy:**

- Develop, implement, and evaluate intervention programs for promoting correct use of child safety seats.
- Encourage enforcement of child safety seat laws by promoting alternative sentencing programs.
- Encourage local health departments and other agencies to train personnel about the correct procedures for child occupant safety.
- Increase counseling efforts by health care providers.

#### Residential Fires

#### 7.15. Reduce fire-related deaths to no more than 1.2 per 100,000.

**Baseline:** Age-adjusted rate was 1.4 per 100,000 in 1996.

**Target Setting Method:** 15 percent improvement over baseline.

**Data Source:** Kentucky death certificates

#### **Implementation Strategy:**

- Promote revision of state and local ordinances and building codes to require smoke alarms in new and existing housing, including manufactured housing.
- Support programs that provide public education that includes positioning of smoke alarms in residences, 'stop, drop, and roll' when clothing ignites, the role of alcohol use in residential fires, and the dangers of playing with matches and lighters.
- Promote development and practice of exit drills in the home.
- Develop and implement fire prevention and education programs that target the elderly.
- Encourage and support fire departments and emergency response teams to be proactive in preventing residential fires.

# 7.16. Increase to 100 percent the presence of functional smoke alarms to at least one on each habitable floor of all inhabited residential dwellings, including the basement.

**Baseline:** 52 percent of residential dwellings had at least one smoke alarm per habitable floor in 1995.

Target Setting Method: Statewide coverage

**Data Source:** Kentucky Behavioral Risk Factor Surveillance System

#### **Implementation Strategy:**

• Support programs that coordinate the distribution and installation of smoke alarms.

Falls

#### 7.17. Reduce deaths from falls to no more than 5 per 100,000.

**Baseline:** 6 per 100,000 in 1996; age adjusted to year 2000

People 65-84 years 20/100,000 People 85 years and over 160/100,000

**Target Setting Method**: 15 percent improvement over baseline.

Data Source: Kentucky death certificates

#### **Implementation Strategy:**

- Educate persons ages 65 and older concerning fall prevention in the home and in public places.
- Perform environmental evaluations to remove hazards causing falls.

#### **Drownings**

#### 7.18. Reduce unintentional drownings to no more than 1.5 per 100,000.

**Baseline:** 1.8 per 100,000 in 1996; age adjusted to year 2000

**Target Setting Method**: 15 percent improvement over baseline.

**Data Source**: Kentucky death certificates

- Educate the public about hazards of open bodies of water and about the dangers associated with drinking alcohol while engaged in aquatic activities.
- Promote swimming and water safety classes for children and teenagers.
- Promote cardiopulmonary resuscitation (CPR) training for adolescents and parents.
- Encourage enforcement of laws prohibiting the operation of boats and personal watercraft while under the influence of drugs or alcohol.
- Promote licensure and standard training for boat and personal watercraft operators.

#### Violence and Abuse

Homicide

#### 7.19. Reduce homicides to less than 5 per 100,000 people.

**Baseline:** 6 per 100,000 in 1996; age adjusted to year 2000

Select Populations	1996
Black males	40.7
White	4.5
Infants aged <1	0
Children aged 1-4	1.2
Children 10-14	1.1
Adolescents aged 15-19	8.3

Target Setting Method: Reduce 25 percent

**Data Sources**: Kentucky death certificates

#### **Implementation Strategy:**

- Pass laws that reduce inappropriate access to firearms.
- Support programs that promote firearm safety.
- Develop surveillance system to provide accurate data about firearm injuries and deaths.

#### Child and Elder Maltreatment

## 7.20 (Developmental) Reduce to less than 4 per 1,000 children the incidence of maltreatment of children younger than age 18.

Types of maltreatment include:

- (1) Physical abuse
- (2) Sexual abuse
- (3) Emotional abuse
- (4) Neglect

**Target Setting Method:** Same as in *Healthy People 2010* 

Potential Data Source: Department for Community Based Services

- Support programs that accumulate information about the incidences and causes of maltreatment; a need exists for Kentucky specific incidence data to describe the magnitude of the problem.
- Evaluate existing interventions and the impact of those interventions.
- Support programs that provide protection services to maltreated children.
- Develop and support programs that are designed to prevent child maltreatment.
- 7.21 (Developmental) Reduce to less than 7 per 1,000 the incidence of maltreatment of persons aged 60 and older.

Baseline: Data Not Available.

Types of maltreatment include:

- (1) Physical abuse
- (2) Sexual abuse
- (3) Emotional abuse
- (4) Neglect

**Target Setting Method:** Same as in *Healthy People 2010* 

Potential Data Source: Department for Community Based Services

#### **Implementation Strategy:**

- Support programs that accumulate information about the incidences and causes of maltreatment; a need exists for Kentucky specific incidence data to describe the magnitude of the problem.
- Evaluate existing interventions and the impact of those interventions.
- Support programs that provide protection services to maltreated elders.
- Develop and support programs that are designed to prevent child maltreatment

Family and Intimate Violence and Sexual Assault

7.22 (Developmental) Reduce physical abuse by current or former intimate partners to less than 23 per 10,000.

**Baseline:** Data Not Available.

**Target Setting Method:** Same as in *Healthy People 2010* 

Potential Data Sources: Department for Community Based Services

- Support programs that accumulate information about the incidences and causes of IPV; a need exists for Kentucky specific incidence data to describe the magnitude of the problem.
- Evaluate existing interventions and the impact of those interventions.
- Support programs that provide protection services to IPV victims.
- Develop and support programs that are designed to prevent IPV.

# 7.23 Reduce the rate of forced sexual intercourse or attempted forced sexual intercourse of persons aged 18 and older to less than 6 per 10,000 persons.

**Baseline**: 11 in 1995.

Target Setting Method: 40 percent reduction

**Data Sources:** Rape Crisis Centers

#### **Implementation Strategy:**

- Increase support to the rape crisis centers that provide services to persons who have experienced rape or other sexual assault.
- Develop population-based educational programs that teach that rape is never excusable.
- Promote college-based programs that counsel and educate about date rape.

#### 7.24 Reduce sexual assault other than rape to less than 0.3 per 1,000 people.

**Baseline:** 0.5 per 1,000 people in 1995.

Target Setting Method: 66 percent improvement.

**Data Source:** Rape Crisis Centers

**Implementation Strategy:** Same as for Objective 7.23.

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118