The consequences of child maltreatment can be profound and may endure long after the abuse or neglect occurs. The effects can appear in childhood, adolescence, or adulthood, and may affect various aspects of an individual’s development (e.g., physical, cognitive, psychological, and behavioral). These effects range in consequence from minor physical injuries, low self-esteem, attention disorders, and poor peer relations to severe brain damage, extremely violent behavior, and death.

While substantial evidence exists for the negative consequences of maltreatment, practitioners should be aware of the limitations of current research. First, many research efforts have studied the effects of child maltreatment among individuals from lower socioeconomic backgrounds, prison populations, mental health patients, or other clinical populations who may exhibit the most serious behavior problems and whose families often have had many other problems (e.g., poverty, parental substance abuse, domestic violence). Further, many early studies examining consequences did not compare outcomes among maltreated individuals with outcomes among individuals who had not experienced maltreatment. In addition, studies often rely on official records or self-reporting of current or past child maltreatment, both of which may undercount the true prevalence of maltreatment. Finally, the nature and extent of maltreatment are different for each child and family, and these differences may influence the consequences.

Despite the above challenges, it is still possible to identify effects that have been more commonly associated with individuals who have experienced abuse and neglect. These effects are discussed in the sections that follow as they relate to three overlapping areas:

- Health and physical effects
- Intellectual and cognitive development
- Emotional, psychological, and behavioral consequences

While maltreated children have a higher risk of certain problems, it cannot be concluded that any given consequence will always occur. Not all children who have been maltreated will suffer severe consequences. A number of factors may influence the effects of maltreatment, including the child’s age and developmental status at the time of the maltreatment, as well as the type, the frequency, the duration, and the severity of the maltreatment and co-occurring problems. In addition, research has identified certain protective factors that mediate the effects of maltreatment. These protective factors and a child’s resilience to negative consequences are addressed in the final section of this chapter.
**HEALTH AND PHYSICAL EFFECTS**

Health and physical effects can include the immediate effects of bruises, burns, lacerations, and broken bones and also longer-term effects of brain damage, hemorrhages, and permanent disabilities. Negative effects on physical development can result from physical trauma (e.g., blows to the head or body, violent shaking, scalding with hot water, or asphyxiation) and from neglect (e.g., inadequate nutrition, lack of adequate motor stimulation, or withholding medical treatments). Specific physical effects as they relate to the early brain development of infants are highlighted in the following sections, along with some general health problems associated with maltreatment. The issue of child fatalities, the most tragic consequence of child maltreatment, is discussed in Chapter 4, “What Is the Scope of the Problem?”

**Physical Effects on Infants**

Infants and young children are particularly vulnerable to the physical effects of maltreatment. Shaking an infant may result in bruising, bleeding, and swelling in the brain. The health consequences of “shaken baby syndrome” can range from vomiting or irritability to more severe effects, such as concussions, respiratory distress, seizures, and death. Other possible consequences include partial loss of vision or blindness, learning disabilities, mental retardation, cerebral palsy, or paralysis.

Infants who have been neglected and malnourished may experience a condition known as “nonorganic failure to thrive.” With this condition, the child’s weight, height, and motor development fall significantly below age-appropriate ranges with no medical or organic cause. The death of the child is the end result in extreme cases. Nonorganic failure to thrive can result in continued growth retardation as well as cognitive and psychological problems. Even with treatment, the long-term consequences can include continued growth problems, diminished cognitive abilities, retardation, and socio-emotional deficits such as poor impulse control.

**Effects on Brain Development**

Over the last decade, researchers have enhanced the field’s understanding of the adverse effects of maltreatment on early brain development. Recent brain research has established a foundation for the neurobiological explanations for many of the physical, cognitive, social, and emotional difficulties exhibited by children who experienced maltreatment in their early years.

One explanation begins with the link between chronic physical abuse, sexual abuse, or neglect and the chronic stress it typically causes in a young child. In reaction to this persistent stress associated with ongoing maltreatment, the child’s brain may strengthen the pathways among neurons that are involved in the fear response. As a result, the brain may become “wired” to experience the world as hostile and uncaring. This negative perspective may influence the child’s later interactions, prompting the child to become anxious and overly aggressive or withdrawn.

Research shows that maltreatment also may inhibit the appropriate development of certain regions of the brain. A neglected infant or young child, for example, may not be exposed to stimuli that would activate important regions of the brain and strengthen cognitive pathways. Consequently, the connections among neurons in these inactivated regions can literally whither away, hampering the individual’s later functioning. If the regions responsible for emotional regulation are not activated, the child may have trouble controlling his or her emotions and behaving or interacting appropriately (e.g., impulsive behavior, difficulties in social interactions, or a lack of empathy).
Other Health-related Problems

Maltreatment may affect an individual’s health in a number of direct and indirect ways. Victims of sexual abuse, for example, may become infected with sexually transmitted diseases including syphilis and human immunodeficiency virus (HIV). Studies have found that women who had experienced sexual abuse were more likely to experience ongoing health problems such as chronic pelvic pain and other gynecologic problems, gastrointestinal problems, headaches, and obesity. Recent research suggests that adults who were maltreated as children show higher levels of many health problems not typically associated with abuse and neglect—heart disease, cancer, chronic lung disease, and liver disease. The link between maltreatment and these diseases may be depression, which can influence the immune system and may lead to higher risk behaviors such as smoking, alcohol and drug use, and overeating.

Cognitive Development and Academic Achievement

Current research differs on findings related to the consequences of maltreatment on cognitive development, verbal abilities, and problem-solving skills. Some studies find evidence of lowered intellectual and cognitive functioning in abused children as compared to children who had not been abused, and other studies find no differences. Research has consistently found that maltreatment increases the risk of lower academic achievement and problematic school performance. Abused and neglected children in these studies received lower grades and test scores than did nonmaltreated children.

Emotional, Psychosocial, and Behavioral Development

All types of maltreatment—physical abuse, sexual abuse, neglect, and psychological or emotional maltreatment—can affect a child’s emotional and psychological well-being and lead to behavioral problems. These consequences may appear immediately after the maltreatment or years later.

Emotional and Psychological Consequences

While there is no single set of behaviors that is characteristic of all children who have been abused and neglected, the presence of emotional and psychological problems among many maltreated children is well documented. Clinicians and researchers report behaviors that range from passive to active and aggressive. Physically and sexually abused children often exhibit both internalizing and externalizing problems. Emotional and psychosocial problems identified among individuals who were maltreated as children include:

- Low self-esteem
- Depression and anxiety
- Post-traumatic stress disorder (PTSD)
- Attachment difficulties
- Eating disorders
- Poor peer relations
- Self-injurious behavior (e.g., suicide attempts)

Maltreated children who developed insecure attachments to caregivers may become more mistrustful of others and less ready to learn from adults. They also may experience difficulties in...
understanding the emotions of others, regulating their own emotions, and in forming and maintaining relationships with peers.\footnote{102}

**Violence, Substance Abuse, and Other Problem Behaviors**

Individuals victimized by child maltreatment are more likely than people who were not maltreated to engage in juvenile delinquency, adult criminality, and violent behavior.\footnote{103} A study sponsored by the National Institute of Justice followed cases from childhood through adulthood and compared arrest records of a group of substantiated cases of maltreatment with a comparison group composed of individuals who were not officially recorded as maltreated. While most members of both groups had no juvenile or adult criminal records, being abused or neglected as a child increased the likelihood of arrest as a juvenile by 53 percent and as a young adult by 38 percent.\footnote{104} Physically abused children were the most likely of maltreated children to be arrested later for violent crime, followed closely by neglected children.

Other studies also have found maltreated children to be at increased risk (at least 25 percent more likely) for a variety of adolescent problem behaviors, including delinquency, teen pregnancy, drug use, low academic achievement, and mental health problems.\footnote{105} It must be underscored, however, that while the risk is higher, most abused and neglected children will not become delinquent, experience adolescent problem behaviors, or become involved in violent crime.

Research also suggests a relationship between child maltreatment and later substance abuse.\footnote{106} In addition to being a risk factor, child maltreatment, particularly sexual abuse, may be a precursor of substance abuse.\footnote{107}

**Resilience**

Not every child who is maltreated will experience the negative consequences discussed above. “Protective factors” that appear to mediate or serve as a “buffer” against the effects of the negative experiences may include:

- Personal characteristics, such as optimism, high self-esteem, high intelligence, or a sense of hopefulness.\footnote{108}
- Social support and relationships with a supportive adult(s).\footnote{109}

The finding that the seriousness of negative effects experienced by victims can be influenced by the availability of support from parents, relatives, professionals, and others has important implications for prevention and early intervention, discussed later in this manual.

Studies have documented the link between abuse and neglect of children and a range of physical, emotional, psychological, and behavioral problems. In addition to the tragic consequences endured by the children who have been maltreated, society pays a high monetary cost for child maltreatment. The costs for child maltreatment include both direct costs (i.e., those associated with the immediate needs of abused and neglected children) and indirect costs (i.e., those associated with the longer term and secondary effects of child maltreatment). Since some maltreatment goes unrecognized and it is difficult to link costs to specific incidents, it is not possible to determine the actual cost of child abuse and neglect. As estimated by Prevent Child Abuse America, the total annual cost of child abuse and neglect in the United States may be as high as $94 billion, as shown in Exhibit 6-1.
<table>
<thead>
<tr>
<th>Source of Costs</th>
<th>Estimated Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Hospitalization</td>
<td>$6,205,395,000</td>
</tr>
<tr>
<td>Chronic health problems</td>
<td>$2,987,957,400</td>
</tr>
<tr>
<td>Mental health care system</td>
<td>$425,110,400</td>
</tr>
<tr>
<td>Child welfare system</td>
<td>$14,400,000,000</td>
</tr>
<tr>
<td>Law enforcement</td>
<td>$24,709,800</td>
</tr>
<tr>
<td>Judicial system</td>
<td>$341,174,702</td>
</tr>
<tr>
<td><strong>Total direct costs</strong></td>
<td><strong>$24,384,347,302</strong></td>
</tr>
<tr>
<td><strong>Indirect Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Special education</td>
<td>$223,607,803</td>
</tr>
<tr>
<td>Mental health and health care</td>
<td>$4,627,636,025</td>
</tr>
<tr>
<td>Juvenile delinquency</td>
<td>$8,805,291,372</td>
</tr>
<tr>
<td>Lost productivity to society (due to unemployment)</td>
<td>$656,000,000</td>
</tr>
<tr>
<td>Adult criminality</td>
<td>$55,380,000,000</td>
</tr>
<tr>
<td><strong>Total indirect costs</strong></td>
<td><strong>$69,692,535,227</strong></td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td><strong>$94,076,882,529</strong></td>
</tr>
</tbody>
</table>