

The National Center on Addiction and Substance Abuse at Columbia University

633 Third Avenue New York, NY 10017-6706

phone 212 841 5200 fax 212 956 8020 www.casacolumbia.org

Board of Directors

Joseph A. Califano, Jr. Chairman and President

Lee C. Bollinger Columba Bush Kenneth I. Chenault Jamie Lee Curtis James Dimon Peter R. Dolan Mary Fisher Victor F. Ganzi Leo-Arthur Kelmenson Donald R. Keough David A. Kessler, M.D. Rev. Edward A. Malloy, CSC Manuel T. Pacheco, Ph.D. Joseph J. Plumeri II Shari E. Redstone E. John Rosenwald, Jr. Michael P. Schulhof Louis W. Sullivan, M.D. John J. Sweeney Michael A. Wiener

Directors Emeritus

James E. Burke (1992-1997) Betty Ford (1992-1998) Douglas A. Fraser (1992-2003) Barbara C. Jordan (1992-1996) LaSalle D. Leffall (1992-2001) Nancy Reagan (1995-2000) Linda Johnson Rice (1992-1996) George Rupp, Ph.D. (1993-2002) Michael I. Sovern (1992-1993) Frank G. Wells (1992-1994)

## Family Matters: Substance Abuse and The American Family

A CASA White Paper

March 2005

Funded by: Primerica Financial Services The Abercrombie Foundation The Coca-Cola Company General Mills DaimlerChrysler Corporation

### **Board of Directors**

Lee C. Bollinger President of Columbia University

**Columba Bush** First Lady of Florida

Joseph A. Califano, Jr. Chairman and President of CASA

Kenneth I. Chenault Chairman and CEO of American Express Company

Jamie Lee Curtis

James Dimon President and COO of JPMorgan Chase & Co.

Peter R. Dolan Chairman and CEO of Bristol-Myers Squibb Company

Mary Fisher Mary Fisher Care Fund

Victor F. Ganzi President and CEO of The Hearst Corporation

Leo-Arthur Kelmenson Chairman Emeritus of the Board of FCB Worldwide

**Donald R. Keough** Chairman of the Board of Allen and Company Incorporated (Former President of The Coca-Cola Company)

**David A. Kessler, M.D.** Dean of the School of Medicine and Vice Chancellor for Medical Affairs, University of California, San Francisco

**Rev. Edward A. Malloy, CSC** President of the University of Notre Dame

#### Manuel T. Pacheco, Ph.D.

Joseph J. Plumeri II Chairman and CEO of The Willis Group Limited

Shari E. Redstone President of National Amusements, Inc.

**E. John Rosenwald, Jr.** Vice Chairman of Bear, Stearns & Co. Inc.

Michael P. Schulhof

Louis W. Sullivan, M.D. President Emeritus of Morehouse School of Medicine

John J. Sweeney President of AFL-CIO

Michael A. Wiener Founder and Chairman Emeritus of Infinity Broadcasting Corporation

#### **Directors** Emeritus

James E. Burke (1992-1997) Betty Ford (1992-1998) Douglas A. Fraser (1992-2003) Barbara C. Jordan (1992-1996) LaSalle D. Leffall, Jr., M.D., F.A.C.S. (1992-2001) Nancy Reagan (1995-2000) Linda Johnson Rice (1992-1996) George Rupp (1993-2002) Michael I. Sovern (1992-1993) Frank G. Wells (1992-1994)

Copyright © 2005. All rights reserved. May not be used or reproduced without the express written permission of The National Center on Addiction and Substance Abuse at Columbia University.

## **Table of Contents**

Accompanying Statement	i
I. Substance Abuse and the Changing American Family	1
Why Focus on Families?	
The Main Victims of Substance Abuse: Children	1
The Strongest Influence Over Children's Substance Use: Families	3
American Families in Transition	
Decline in Marriage Rates	3
Increase in Divorce	3
Increase in Single Parent Families	4
Increase in Economic Disadvantage	
Increasing Role of Grandparents in Children's Lives	4
Increasing Recognition of the Important Role of Fathers	
in Children's Lives	5
Cultural and Racial/Ethnic Differences in the Role of Families	
in Substance Abuse	
II. Health Effects of Parental Substance Abuse on the Family	
Prenatal Exposure to Tobacco, Alcohol and Illicit Drug Use	
Smoking	
Alcohol	
Illicit Drugs	9
Other Health Consequences Associated with Prenatal	10
Exposure to Substances	10
Living with a Substance-Abusing Parent Can Put Children's Physical	10
and Mental Health at Risk	
Exposure to Environmental Tobacco Smoke	
Accidents and Injuries Due to Parents' Alcohol or Drug Use	
Children of Alcohol and Drug Abusers are at Greater Risk for Mental Health Problems	11
Children of Substance Abusers are at Increased Risk for Substance Abuse	
Environment and Genetics	
Children of Alcoholics	
III. Substance Abuse Affects Family Functioning	
Financial Problems	
Economic Consequences of Smoking	
Economic Consequences of Alcohol Abuse	
Cost of Caring for Substance-Abusing Family Member	
Marital Dissatisfaction and Increased Risk of Divorce	
Divorce Increases Children's Risk for Substance Abuse	
Shifting Family Roles	
Increased Exposure to Illness	
Partner Violence	
Children of Substance Abusers are at Risk for Abuse and Neglect	20
Abuse and Neglect Increases Children's Risk for Substance Abuse	
Trouble in School	
High Turnover in Childcare	21

Stigma and Social Isolation	21
Stigma and Social Isolation Interfere with Children's Academic	
and Social Success	22
Exposure to Crime	22
Unstable Family Environments Contribute to Children's Substance Use.	
IV. What Parents Can Do To Prevent Children's Substance Use and Abuse	23
Model Responsible Behaviors	23
Monitor Children's Whereabouts, Activities and Friends	
Know if Your Child is at Particularly High Risk	
Co-occurring Disorders	
Dangerous Times	25
Other Factors That Increase Risk	25
Set Rules and Expect Children to Abide by Them	26
Foster Positive and Supportive Relationships with Children	
Maintain Open Lines of Communication	27
Maintain Family Rituals, Such as Eating Dinner Together Regularly	28
Involve Other Family Members, Friends and Neighbors in Children's	
Lives; Be Sure Dad is Engaged	29
Incorporate Religion or Spirituality into Family Life	30
V. Where to Turn for Help	31
Educate Yourself to Recognize the Signs and Symptoms	
of Substance Abuse	31
Signs and Symptoms of Risk for Substance Abuse in	
Young Family Members	31
Signs and Symptoms of Risk for Substance Abuse in	
Adult Family Members	32
Intervene Early with Children at High Risk	33
Substance Abuse and Mental Health Services Administration	
(SAMHSA) Model Program	33
Children of Parents in Recovery	
Get Professional Help for Substance-Abusing Family Members	
Help for Substance-Abusing Children	
Help for Substance-Abusing Adults	
How Family Members Can Help a Substance Abuser Enter Treatment	
The Johnson Intervention	
Community Reinforcement and Family Training (CRAFT)	
Support for the Non-Abusing Family Members	
Al-Anon	
Alateen	
Adult Children of Alcoholics (ACA)	
Families Anonymous	
Other Resources	
Appendix A	
Notes	
Bibliography	58

More than a decade of intense policy research and scores of field demonstrations have taught us an important lesson at The National Center on Addiction and Substance Abuse (CASA) at Columbia University: the route to a drug-free America is through our children. A child who gets through age 21 without smoking, using illegal drugs or abusing alcohol is virtually certain never to do so. And, for better or worse, the greatest influence on our children is in their families.

To explore the link between substance abuse and America's families, in April 2004 CASA hosted the CASACONFERENCE, *Family Matters: Substance Abuse and The American Family.* This conference featured keynote addresses and panel discussions to examine four key issues:

- Situations and characteristics that influence children's risk of abusing substances;
- What parents can do to reduce their children's risk of substance abuse;
- How parents can spot substance abuse by their children and what to do when they spot it; and,
- The impact of substance abuse on the American family, such as divorce, teen pregnancy, child and spousal abuse and juvenile delinquency.

Substance abuse knows no class boundaries, devastating families of CEOs as well as families of women on welfare. Changing demographics, however, have altered the American family in recent years. Marriage rates have declined. Divorce rates have increased. Single parent families are common and likelier to be in economic distress. Grandparents are raising their grandchildren. These situations increase the risk that parents involved will smoke, abuse alcohol and use drugs, and that their children will do the same. In the United States today:

- Half of all children (35.6 million) live in a household where a parent or other adult uses tobacco, drinks heavily or uses illicit drugs.
- 37.4 percent of children (27 million) live in a household where a parent or other adult smokes or chews tobacco.
- 23.8 percent of children (17 million) live in a household where a parent or other adult is a binge or heavy drinker.
- 12.7 percent of children (9.2 million) live in a household where a parent or other adult uses illicit drugs.

Alcohol and drug abuse are family diseases with severe consequences for all family members, particularly children. Prenatal exposure to tobacco, alcohol and drugs is associated with miscarriage, stillbirth, sudden infant death syndrome (SIDS), low birth weight and physical deformities, cognitive impairment, conduct disorders, depression and mental retardation. Parental alcohol and drug abuse increase the incidence of family violence, divorce, financial problems and exposure to crime. Substance abusing parents are much likelier than parents who don't abuse alcohol or drugs to abuse and neglect their children. Children of smokers are likelier to suffer ear infections, asthma, bronchitis and pneumonia. Children of parents who smoke, use illegal drugs or abuse alcohol are likelier to do the same. Parents who are permissive about their children's substance use put them at greater risk of smoking, drinking and using drugs.

The good news is that parents have enormous power to be a healthy influence on their children, to help steer them from involvement with tobacco, alcohol and drugs. Parents who abstain from cigarettes and illegal drugs, drink responsibly, have high expectations for their children, monitor their whereabouts, know their friends and provide loving support and open communication are less likely to have children who smoke, drink and use drugs. Parents who consistently disapprove of tobacco, alcohol or drug use are much likelier to have teens who grow up drug free. Teens whose parents are "hands on"--engaged in their teens' lives, supervising them, establishing rules and standards of behavior--are at one-fourth the risk of abusing substances. Teens from families where religion is important are less likely to smoke, drink and use drugs. Teens with an excellent relationship with either parent are at 25 percent lower risk for substance abuse; those with excellent relationships with both parents are at 40 percent lower risk.

One simple way for parents to be engaged in their children's lives is to sit down to dinner with them frequently. CASA's research consistently shows that the more often teens have dinner with their parents, the less likely they are to smoke, drink or use drugs. Teens who eat dinner with their families five or more nights a week are almost 50 percent less likely to try alcohol compared to teens who have dinner with their families two nights a week or less.

The most effective place to curb substance abuse in America is not in courtrooms and government committee rooms, but in living rooms and dining rooms. And, the most effective and underutilized tool in the struggle to keep our children and teens drug free is parent power. Three key actions parents can take are to: educate themselves to recognize the signs and symptoms of substance abuse; intervene early with children at highest risk (by virtue of family history, emotional or behavioral problems); and get professional help when they spot substance abuse. Even in families where substance abuse is present a non-abusing parent or other extended family member can offer help. This White Paper provides concrete and practical recommendations for family members to prevent substance abuse and to intervene when it occurs.

The *Family Matters* CASACONFERENCE and this White Paper were made possible by a generous grant from Primerica Financial Services and support from The Abercrombie Foundation, The Coca-Cola Company, General Mills and the DaimlerChrysler Corporation. We greatly appreciate the distinguished readers who contributed to the quality of this undertaking: Ralph I. Lopez, MD, Clinical Associate Professor of Pediatrics and Associate Attending Physician, Weill Cornell Medical Center; Karol Kumpfer, PhD, Associate Professor at the University of Utah, and Director of the Strengthening Families Program; Claire Ricewasser, Associate Director of Public Outreach, Al-Anon Family Group Headquarters, Inc.; and Sis Wenger, Executive Director of the National Association for Children of Alcoholics.

Susan E. Foster, MSW, CASA's Vice President and Director of Policy Research and Analysis, directed this effort. Linda Richter, PhD, senior research manager, was the Principal Investigator. Other CASA staff who contributed to the research were: Sally Mays, research assistant; David Man, PhD, MLS, CASA librarian and his colleagues Ivy Truong-Tom and Barbara Kurzweil; and Alex Greenshields, bibliographic database manager. Jennie L. Hauser handled the administrative responsibilities.

While many individuals and institutions contributed to this effort, the findings and opinions expressed herein are the sole responsibility of CASA.

Anyone who has watched a family member struggle with substance abuse or addiction-whether to tobacco, alcohol, illicit or prescription drugs--knows how painful and disruptive it can be to family life. Addiction does not begin and end with the abuser; it sends shock waves through an entire family unit. The reach of substance abuse also extends to schools, communities, health and welfare agencies, the justice systems and to society at large. We all shoulder the costs. Children of substance abusers suffer the most, from direct effects on their physical and mental health to influences on their own use of tobacco, alcohol or drugs.

The family's role in the development and results of substance abuse is unique: it suffers some of the most dire consequences and holds the potential of the most powerful protective influences against it. This CASA White Paper explores the effects of substance abuse on the family unit as a whole and on children in particular. It also examines the multiple ways in which the family influences its members, particularly its children, in their own choices about smoking, drinking and using drugs.

## Why Focus on Families?

A focus on families is critical to understanding and preventing the destructive intergenerational cycle of substance abuse and addiction. Alcoholism and drug abuse often are referred to as family diseases because the serious negative consequences of addiction and the importance of recovery affect not only the substance abuser but all members of the family.<sup>1</sup>

#### The Main Victims of Substance Abuse: Children

Half (49 percent) of all children in the United States today under age 18 (35.6 million) live in a home where a parent or other adult uses tobacco,<sup>\*</sup> drinks heavily or binge drinks<sup>†</sup> or uses illicit drugs.<sup>\*</sup> Over a third (37.4 percent) of children (27 million) live in a household where a parent or other adult uses tobacco. Approximately one in four children (23.8 percent, 17 million) live in a household where a parent or other adult is a binge or heavy drinker. More than one in 10 children (12.7 percent, 9.2 million) live in a household where a parent or other adult uses illicit drugs.<sup>2</sup>

There are several major family factors that influence the extent to which children of substance abusers will be affected by their parents' substance abuse, including the age of the child when the parent becomes involved in substance abuse, the extent or severity of the involvement, the parent's ability to fulfill the parental role in a healthy way, the child's temperament and the extent to which the family and child are isolated socially from friends and the surrounding community.<sup>3</sup> Stress due to family conflict and inconsistencies in rules, discipline and rituals can exacerbate the detrimental effects of parental substance abuse on children.<sup>4</sup> Substance abusers' households tend to be high in conflict, likelier than others to include velling, insults and serious arguments and characterized by poor communication patterns<sup>5</sup>-making the home an unstable and difficult place for children to grow up. Substance-abusing parents tend to engage in fewer family activities with their children and sometimes abdicate their parenting roles, leaving children to take on roles and responsibilities that are inappropriate for their age.<sup>6</sup>

Parental substance abuse is one of the main problems facing families who are reported for child maltreatment.<sup>7</sup> Parents with substance abuse problems are approximately three times likelier to report abuse towards their children and four times likelier to report neglect than parents without substance abuse problems.<sup>8</sup>

\* Use in the past year.

Substance abuse and addiction know no class boundaries. The CEO is no less likely to struggle with the emotional and health impact of smoking, drinking or drug use on his or her family than is the single mother on welfare. However, the negative impact on the family can be more profound if healthcare, childcare and economic and housing stability are not available.

Unemployment or poverty also can increase the risk of child abuse or neglect by a substanceabusing parent.<sup>9</sup> Children of substance-abusing parents often face an "accumulation of risk," that is, a variety of life circumstances occurring together that put them at heightened risk for negative outcomes. For instance, one study of children of mothers entering a long-term residential treatment program found that, on average, the children possessed six and one-half risk factors, the most common being the family's low-income status and not living in a two-parent home.<sup>10</sup> (Table 1.1)

# Table 1.1Selected Risk Factors Among Children Whose<br/>Mothers Entered Residential Treatment.11

	Percent of Children
Low income status	91.3
Not living in two parent home	90.9
Minority status	77.2
Maternal use of cigarettes while pregnant	69.8
Maternal use of alcohol or drugs while	61.6
pregnant	
Maternal mental illness	58.3
Mother involved with child protective	56.6
services	
Low maternal education	52.2
Poor quality father relationship	49.0
Homeless in past two years	28.2
Placed in neonatal intensive care unit	18.6
(NICU) at birth	
Source: Conners, et al. (2004).	

<sup>&</sup>lt;sup>†</sup> Heavy drinking is consuming five or more drinks on one occasion five or more days in the past month. Binge drinking is consuming five or more drinks on the same occasion at least once in the past month.

<sup>\*</sup> Use in the past year.

## The Strongest Influence Over Children's Substance Use: Families

Parents and family members can have an enormous positive impact on children's substance-use decisions and behavior. No protection is absolute, but parents hold the greatest number of tools and have the greatest opportunity to shape children's choices when it comes to trying and continuing to use cigarettes, alcohol and drugs.

Independent research as well as the opinion of experts participating in CASA's 2004 CASACONFERENCE, *Family Matters: Substance Abuse and The American Family*, reveal that parents who abstain from cigarettes and illegal drugs, drink responsibly, have high expectations for their children, monitor their whereabouts, know their friends and provide loving support and a forum for communication are less likely to have children who use and abuse tobacco, alcohol or drugs. (See Chapter IV.)

While it may seem that the myriad negative influences surrounding children and disposing them to use tobacco, alcohol or drugs--substanceusing peers, cigarette and alcohol advertisers, the entertainment media, deteriorating neighborhoods or substance-ridden schools--pose too much of a challenge to overcome, parents should be aware that study after study shows that theirs is the voice and their behavior is the model that most significantly influences children's substance use.<sup>12</sup>

## **American Families in Transition**

The definition of a family has been changing dramatically over the past century, and particularly over the course of the past few decades, in ways that may be linked to current patterns of substance use and abuse.

Trends that have affected the American family in the past half-century include the decline in marriage rates, the rise in the divorce rate and the increase in women's participation in the labor force. Increased economic hardship and the expanding roles of grandparents and fathers in raising children are particularly common among the rising numbers of single-parent families.<sup>13</sup> At the same time, there are cultural and racial/ethnic differences in the role that families play in substance abuse.

#### Decline in Marriage Rates

Americans are spending increasing years of their lives without the protective effects of marriage. Research indicates that marriage is associated with a lower risk of substance abuse. Married women are less likely than those who have never been married, have divorced or have lived with an unmarried partner to smoke, binge drink or use illicit drugs.<sup>14</sup>

In the 1950s, Americans shared a common image of the ideal family, which consisted primarily of a breadwinner husband, a homemaker wife and two or more children. The 1950s and early 1960s has been held up as a standard or baseline to which other family arrangements are compared. In 1960, more than 50 percent of all families fit this ideal.

After the 1960s, the typical age of first marriage increased; instead of marrying immediately, young people tended to move out of their parents' homes and into non-family households. By the end of the 1980s, only 20 percent of all families fit the standard family ideal of the 1950s.<sup>15</sup> Between 1960 and 1997, the median age at first marriage rose four to five years among men and women.<sup>16</sup> More American adults today never marry at all; 56 percent of adults were married in 1998 compared to nearly 75 percent in 1972.<sup>17</sup>

#### Increase in Divorce

Parental divorce can have an important impact on a child's risk for substance use. For example, teens with divorced parents are 50 percent likelier to drink alcohol than teens with married parents (54 percent vs. 36 percent).<sup>18</sup> In 2003, the per capita divorce rate was just over half of the marriage rate--that is, for every two marriages, there was approximately one divorce.<sup>19</sup> Over the course of three decades (the 1960s through the 1980s), the proportion of divorces to marriages increased more than fourfold.<sup>20</sup> While the per capita divorce rate has declined from a high in the late 1970s and early 1980s, it still is nearly double the rate of 1960.<sup>\* 21</sup>

#### Increase in Single Parent Families

Children who grow up in two-parent homes are at lower risk for substance abuse than children who grow up in single parent homes.<sup>22</sup>

Families today are equally likely or more likely to be comprised of childless couples with two careers, single parent families or cohabiting couples with children than they are of the "typical" family of years past. The last census reveals that households headed by married couples account for only about half of all American households, compared to nearly 75 percent in 1960.<sup>23</sup>

By 1998, households with children--the predominant living arrangement in the 1970s and earlier--had fallen to third place behind the less "standard" arrangements of households with no children and no married couples and households with married couples without children. The percentage of children reared by two parents in an uninterrupted marriage was about 73 percent in 1972 and only 52 percent in 1998.<sup>24</sup> Today, 28 percent of children live with a single parent.<sup>25</sup> Five out of six single parents are single mothers.<sup>26</sup>

#### Increase in Economic Disadvantage

The increase in single-parent families has served to broaden the economic inequality across American households, often with single-mothers comprising the poorer end of this spectrum. Some studies show that low-income, inner-city children are at higher risk for substance use and other problem behaviors;<sup>27</sup> however, the relationship between economic status and substance use risk is not clear-cut, with some affluent children using substances at higher rates than children of low socioeconomic status.<sup>28</sup> Nevertheless, the consequences of substance use for those who are economically disadvantaged typically are greater than they are for wealthier substance users.

More than 26 percent of families are headed by a single mother living in poverty.<sup>29</sup> Today, 12.9 million of the nation's children live in poverty.<sup>30</sup> There are 850,000 homeless children and youth living in the United States.<sup>31</sup> Compared to children growing up in the suburbs, children in inner cities are twice as likely to be at high risk for poverty and unemployment.<sup>32</sup>

Substance abuse can push already struggling families into more difficult financial straits as a result of health problems, accidents, missed work and lower productivity. (See Chapter III) The academic and behavioral problems some children of substance abusers face may in turn limit their eventual professional and economic attainment.<sup>33</sup>

## Increasing Role of Grandparents in Children's Lives

Increasing numbers of grandparents are serving as the primary caretakers of their grandchildren because substance-abusing parents often cannot care adequately for their own children. Children raised exclusively by grandparents without a parent in the home are at higher risk for substance abuse.<sup>34</sup> Many children who are raised by their grandparents grow up in loving environments and turn out to be wellfunctioning adults.<sup>35</sup> However, since the grandparents' parenting skills may have contributed originally to their children's inability to be effective parents, they may similarly expose their grandchildren to higher risk.

In 2002, 5.6 million children living in the U.S. (eight percent) lived in a household that included their grandparents;<sup>36</sup> approximately one-third of children in 2002 who lived in their grandparents' home (three and a half percent of all children) did so with neither of their parents present. Children living in their grandparents' home without their parents are more likely to be poor (30 percent) than children living in their grandparents (15

<sup>\* 1960: 2.2</sup> divorces per 1,000; 1979: 5.3 divorces per 1,000; 2003: 3.8 divorces per 1,000.

percent) or in their parents' home with a grandparent present (12 percent).<sup>37</sup>

#### Increasing Recognition of the Important Role of Fathers in Children's Lives

CASA has found that teens who are at the least risk of engaging in risky behaviors such as substance use are those who have positive relationships with both their mother and their father.<sup>38</sup> Indeed, parents, especially fathers, have a far greater influence over their children's risktaking behaviors than they might think.<sup>39</sup> In families with alcohol or drug abusing parents, healthy relationships are difficult to attain with either parent.

In a recent study of African-American inner-city families, researchers found that it was not simply the presence of a father in the home that was important, but rather the nature of the father's involvement in the child's life.<sup>40</sup> That is, child neglect--a risk factor for later substance abuse--was less likely to occur in families where the father or a father figure was involved with the child over an extended period, felt effective in his parenting and was involved in household tasks.<sup>41</sup>

## Cultural and Racial/Ethnic Differences in the Role of Families in Substance Abuse

Family circumstances and attitudes and the rates and consequences of substance abuse vary dramatically among families from different cultural, racial or ethnic backgrounds.<sup>42</sup> White children (77 percent) are more likely than both black (36 percent) and Hispanic (65 percent) children to live with two married parents.<sup>43</sup> Fewer whites (eight percent) and Asians (10 percent) live in poverty than Hispanics (22 percent), blacks (23 percent) or Native Americans (23 percent).<sup>\* 44</sup> Black children are more likely than children of other races to live with a single grandmother with no parents present, increasing their likelihood of living in poverty 5.6 times.<sup>45</sup> Media promotions (billboard and mass media advertising, alcohol industry-sponsored activities) and the presence of liquor stores are

disproportionately present in minority neighborhoods.<sup>46</sup>

Substance use rates are highest among Native American and white children and lowest among black and Asian-American children, with Hispanics falling in the middle.<sup>47</sup> One explanation for lower rates of use among black children is that their parents tend to communicate greater disproval of substance use to their children<sup>48</sup> and are likelier to incorporate religion into their lives which protect children from engaging in substance abuse.<sup>49</sup> However, when minority individuals do engage in substance use--particularly drinking--they are likelier to experience higher rates of substance dependence, illnesses such as cirrhosis or cancer and financial, legal, spousal and job-related problems.<sup>50</sup>

<sup>\*</sup> Averaged rates, 2000-2002.

Family members living with a chronic substance abuser often suffer from psychological and emotional stress, as well as physical problems such as insomnia, headaches, allergies, asthma, gastrointestinal problems, cardiovascular disease and even cancer.<sup>1</sup>

Children of substance abusers face three main sources of risk to their health. Prenatal exposure to tobacco, alcohol and drugs can impair their physical and mental development. Growing up in a substance-abusing environment can expose them to environmental tobacco smoke, rides in a car with a parent who is under the influence of alcohol or drugs or to neglect or abuse. It also puts them at risk for conduct disorders, depression, anxiety and academic difficulties. The prenatal and environmental effects of exposure to parental substance abuse are known pathways to children's own substance use and abuse.

## Prenatal Exposure to Tobacco, Alcohol and Illicit Drug Use

Prenatal exposure to tobacco, alcohol and drugs is associated with a host of physical, mental and cognitive disorders. The problems faced by children exposed prenatally to substances of abuse often continue into adolescence and adulthood, burdening them with ailments that may be as bad as or worse than those experienced by the actual substance abuser.<sup>2</sup>

#### Smoking

Nearly one-third (31.1 percent) of women of reproductive age report smoking cigarettes in the past month, as do 17.3 percent of pregnant women.<sup>3</sup> Among those who are pregnant, younger women ages 18 to 25 are more likely to report smoking cigarettes than women ages 26 to 44 (26.4 percent vs. 10.2 percent).<sup>4</sup>

Nicotine exposure during pregnancy increases the flow of carbon monoxide to the fetus and decreases placental flow, putting the infant at risk for growth retardation, low birth weight, premature delivery, spontaneous abortion and other complications of pregnancy and delivery.<sup>5</sup> As many as 14 percent of premature deliveries and 10 percent of all infant deaths can be linked to tobacco use during pregnancy.<sup>6</sup> In 2002, 12.2 percent of smoking mothers (vs. 7.5 percent of non-smoking mothers) had a low birth-weight baby.<sup>7</sup> Low birth weight can lead to an infant's death, often from Sudden Infant Death Syndrome (SIDS).<sup>8</sup>

Children exposed prenatally to smoking may suffer from a variety of cognitive and behavioral developmental problems that could increase their vulnerability to substance abuse. Longterm cognitive effects include lower IQ and poor verbal, reading and math skills.<sup>9</sup> Long-term behavioral effects include an increased risk for conduct disorders, attention deficit hyperactivity disorder and drug dependence.<sup>10</sup> One decadelong study found that, compared to children of nonsmoking mothers, male children of mothers who smoked more than 10 cigarettes nearly every day while pregnant were over three times likelier to have conduct disorder in their lifetime. Female children of mothers who smoked the same amount were over five times likelier to develop drug abuse or dependence.<sup>11</sup>

The extent of the negative effects that a child experiences due to prenatal exposure to smoking is dependent on the frequency and quantity of that exposure; the greater the exposure, the more likely the child is to suffer.<sup>12</sup>

#### Alcohol

More than half (53.4 percent) of women of reproductive age report drinking alcohol in the past month, as do 9.1 percent of pregnant women.<sup>13</sup> Younger pregnant women ages 18 to 25 are more likely to report drinking alcohol than older pregnant women ages 26 to 44 (10 percent vs. 8.3 percent).<sup>14</sup> Younger women of childbearing age also have higher rates than women of other ages of alcohol abuse and dependence (nearly 10 percent for women ages

18 to 29 vs. four percent for women ages 30 to 44).<sup>15</sup>

#### Health Consequences for Smoking Mothers and Their Children

Mother

- Cancer
- Ectopic pregnancies
- Miscarriages

<u>Baby</u>

- Stillbirth
- Low birth weight
- Sudden Infant Death Syndrome (SIDS)
- Cleft palate and cleft lip
- Chronic ear infections
- Tonsillitis
- Asthma
- Bronchitis
- Pneumonia
- Fire-related death and injuries
- Behavior disorders during childhood and adolescence
- Obesity and diabetes in adulthood

Prenatal exposure to alcohol increases the risk of a wide range of physical and mental health problems in children.<sup>16</sup> The full range of possible outcomes resulting from maternal alcohol use during pregnancy is referred to as fetal alcohol spectrum disorder (FASD).<sup>17</sup> The most severe is Fetal Alcohol Syndrome (FAS).<sup>18</sup> Children with FAS are small for their age, and are born with facial anomalies and damage to the central nervous system.<sup>19</sup> Other possible FAS characteristics are cardiac problems, skeletal malformations, visual and auditory deficits and altered immunological function.<sup>20</sup> These problems may be due to poor blood flow, hormonal imbalances and the direct effects of alcohol on cellular processes during the prenatal period.<sup>21</sup> The time of greatest likelihood of damage to the fetus' brain occurs during the final trimester of pregnancy when the brain is developing rapidly.<sup>22</sup>

Other problems that have been associated with FAS and prenatal exposure to alcohol--all of which make the child more susceptible to difficulties in schooling and put him or her at risk for substance abuse--include hyperactivity

and attention deficits, memory difficulties, poor problem solving skills, significant weakness in arithmetic skills, lower IQ scores and problems with language, perception and motor development.<sup>23</sup>

FAS is the leading cause of preventable mental retardation in the Western world.<sup>24</sup> Approximately six percent of the offspring of alcohol-abusing women have FAS,<sup>25</sup> with up to 8,000 babies born with it each year in the U.S.<sup>26</sup> The actual rate of FAS probably is even higher than these estimates, given the difficulty in making the diagnosis and because many physicians are reluctant to label children as having FAS and their mothers as being alcoholics due to the attached stigma.<sup>27</sup>

Many children born with FAS continue to suffer into adulthood. One study found that the majority of adults with FAS or fetal alcohol effects (FAE, a more mild form of FAS) suffer from substantial mental illness, including drug and alcohol dependence, depression, bipolar disorder, anxiety disorder and eating disorders, as well as avoidant, antisocial and dependent personality disorders. In this study, 72 percent of the participants born with FAS had received some form of psychiatric treatment, with 24 percent requiring hospitalization in a psychiatric institution.<sup>28</sup>

Even moderate levels of prenatal exposure to alcohol can have detrimental effects on children's learning and behavior.<sup>29</sup> Prenatal exposure to alcohol is associated with antisocial and delinquent behavioral problems during adolescence and young adulthood, including poor impulse control, poor social adaptation, inappropriate sexual behavior, trouble with the law, problems with employment and alcohol or drug problems.<sup>30</sup>

Many factors can contribute to the severity of effects experienced by a child prenatally exposed to alcohol, such as how much alcohol he or she is exposed to, the pattern of the mother's drinking, the stage of pregnancy during which the drinking occurred, the use of other drugs and the mother's nutrition and prenatal care.<sup>31</sup> The duration of alcohol exposure during pregnancy influences the extent of impairment in children's attention, language and memory skills up to early adolescence.<sup>32</sup> The mother's age, the presence of maternal psychiatric disorders and the family's socioeconomic status also all influence the extent of the problems resulting from prenatal exposure to alcohol.<sup>33</sup>

#### Prenatal Exposure to Alcohol: Long-Term Problems<sup>34</sup>

- Hyperactivity and attention deficits
- Childhood depressive symptoms
- Memory and information processing difficulties
- Poor problem solving skills
- Deficits in abstract thinking and flexibility
- Significant weakness in arithmetic skills
- Lower IQ scores
- Problems with linguistic, perceptual and motor development

#### Illicit Drugs

Approximately 10.3 percent of women of reproductive age report using illicit drugs in the past month, as do 3.3 percent of pregnant women.<sup>35</sup> Younger pregnant women ages 18 to 25 are more likely to report using illicit drugs than older pregnant women ages 26 to 44 (6.6 percent vs. 0.5 percent).<sup>36</sup>

More than half of the pregnant women who use illicit drugs also drink and smoke during pregnancy.<sup>37</sup> Pregnant women are likelier to use marijuana (2.9 percent) or misuse prescription drugs (0.8 percent) than they are to use cocaine (0.3 percent) or hallucinogens (0.2 percent).<sup>38</sup>

The majority of children who have been exposed prenatally to illicit drugs also have been exposed to other risk factors during childhood, including parental use of tobacco or alcohol, poverty or neglect or abuse.<sup>39</sup> Because of financial limitations or fear of legal repercussions, drugabusing women seldom receive adequate prenatal care. This lack of adequate prenatal care may account for some of the physiological and psychological problems found in children born to drug-abusing women.<sup>40</sup> **Marijuana.** Some of the effects of prenatal exposure to marijuana use are similar to those of tobacco, including increased carbon monoxide levels and reduced oxygen flow that place the fetus at risk for future verbal and memory problems.<sup>41</sup> Heavy marijuana use has been associated with low birth weight, premature delivery and complications in delivery.<sup>42</sup>

**Opiates.** Prenatal exposure to opiates, such as heroin or methadone, has been associated with premature delivery, miscarriages, low birth weight and increased risk for SIDS.<sup>43</sup> In most cases, prenatal exposure to opiates produces withdrawal symptoms in the newborn soon after birth, including respiratory problems, restlessness, disturbed sleep, feeding problems, vomiting, diarrhea, fever and excessive crying. The duration of these symptoms can last anywhere from eight weeks to several months. Up to 90 percent of opioid-exposed infants require special handling and medical intervention.<sup>44</sup> Many children who are exposed prenatally to opiates suffer from attention problems and developmental delays.<sup>45</sup>

**Cocaine.** Cocaine use results in increased blood pressure and respiration. In pregnant women, these effects translate into decreased oxygen and nutrition flow to the fetus placing the fetus at greater risk for growth retardation, low birth weight, premature delivery, spontaneous abortion, premature detachment of the placenta and stillbirth.<sup>46</sup> Infants prenatally exposed to cocaine are at increased risk for intracranial hemorrhage, seizures and respiratory distress, are likelier to demonstrate movement problems at birth and may experience symptoms of irritability, hyperactivity and problems with sleep and feeding.<sup>47</sup>

**Other Stimulants.** Many of the effects of prenatal exposure to amphetamines and methamphetamines are similar to those found in children prenatally exposed to cocaine or heroin,<sup>48</sup> including withdrawal symptoms, irritability, sleep problems and developmental delays.<sup>49</sup>

## Other Health Consequences Associated with Prenatal Exposure to Substances

Mothers who abuse substances may expose their babies to infectious diseases. A mother who has multiple sexual partners, a history of prostitution or a history of injection drug use (all behaviors associated with drug abuse) puts her fetus at risk for gonorrhea, syphilis, herpes, chlamydia, hepatitis B, multiple drug-resistant tuberculosis (TB) and human immunodeficiency virus (HIV) and/or AIDS.<sup>50</sup>

## Living with a Substance-Abusing Parent Can Put Children's Physical and Mental Health at Risk

Many aspects of the environment in which the children of substance-abusing parents are reared can be detrimental to children's physical and mental health and increase their own risk for substance use and abuse. In 2002, almost five million adults who abused or were dependent on alcohol had at least one child younger than 18 living with them.<sup>51</sup> Many of these alcohol-abusing adults also smoked cigarettes (57.9 percent) or used illicit drugs (35.5 percent).<sup>52</sup>

#### Exposure to Environmental Tobacco Smoke

Environmental tobacco smoke (ETS) is present in just over 25 percent of households with children under the age of 18.53 Children of smokers have a disproportionate number of medical conditions compared to children of nonsmokers. Non-smokers who are exposed to ETS absorb nicotine and other carcinogenic materials just as smokers themselves do, although the smoke is less concentrated. One study found that 87.9 percent of children and adult non-users of tobacco had detectable levels of serum cotinine (a metabolite of nicotine) in their blood, indicating the widespread exposure to ETS.<sup>54</sup> Exposure to ETS has both short- and long-term effects on the child. Because the respiratory tract of a young child is not fully developed,<sup>55</sup> children exposed to tobacco smoke are at greater risk than non-exposed children for respiratory illness, cough, asthma and SIDS. In addition,

these children are more likely to suffer from ear infections and to have their tonsils and/or adenoids surgically removed.<sup>56</sup> The longer-term effects include higher risks of lung and other forms of cancer, atherosclerosis<sup>\*</sup> and coronary heart disease.<sup>57</sup>

Every year, ETS exposure among children living in the United States is associated with an estimated 700,000 to 1.6 million visits to the doctor for ear infections; 14,000 to 21,000 tonsillectomies and/or adenoidectomies; 8,000 to 26,000 new cases of asthma, 400,000 to one million cases of exacerbations of asthma symptoms and 529,000 physician visits for asthma; 1.3 to two million visits for coughs; and 150,000 to 300,000 cases of bronchitis or pneumonia (primarily among younger children). ETS exposure also is associated with 280 to 360 childhood deaths from respiratory illness, more than 300 fire-related injuries and 1,900 to 2,700 deaths due to SIDS.<sup>58</sup>

Mothers who smoke and breast-feed their babies put their children at even greater risk for ETS exposure. Cotinine levels are five to 10 times higher in breast-fed infants of smoking mothers than among bottle-fed infants of smoking mothers, indicating higher levels of ETS exposure. Cotinine levels also are elevated among both breast-fed and bottle-fed children of non-smoking mothers who live in a household with a smoker.<sup>59</sup> Thus, infants can be exposed to nicotine and cotinine from ETS via both inhalation and ingestion.

#### Accidents and Injuries Due to Parents' Alcohol or Drug Use

Alcohol is found in the blood of up to 60 percent of motor vehicle crash victims, up to 50 percent of suicides, up to 46 percent of homicide victims, up to 50 percent of drowning victims and up to 64 percent of fire and burn fatalities.<sup>64</sup> In 2002, there were 17,419 alcohol-related traffic fatalities (41 percent of total traffic fatalities) and 258,000 alcohol-related injuries due to automobile crashes alone.<sup>65</sup> Thirty-two

#### Environmental Tobacco Smoke Affects the Whole Family

Children are not the only family members of smokers who suffer from ETS. One study found that those who never smoked and lived with a smoker were approximately 15 percent likelier to have died in the three-year time period studied than those who never smoked and did not live with a smoker.<sup>60</sup> ETS exposure causes approximately 3,000 lung cancer deaths and 35,000 to 62,000 deaths due to heart disease in the United States per year.<sup>61</sup>

Women exposed to ETS from their spouses have an approximately 24 percent-added risk of lung cancer; this risk increases with duration of marriage for women with a spouse who smokes.<sup>62</sup> Women exposed to ETS are twice as likely to develop breast cancer than non-exposed women and, among women who first were exposed before the age of 12, the risk for developing breast cancer is over four times that of women not exposed at a young age.<sup>63</sup>

percent of the people who were killed in alcohol-related crashes were non-intoxicated occupants and non-occupants of the car.<sup>66</sup> There is little doubt that many of the non-intoxicated occupants were family members of a substance abuser who drove while under the influence of alcohol or other drugs. Recent research reveals that between 1997 and 2002, 2,355 children died in alcohol-related crashes; 68 percent of those children were riding with a driver who had been drinking.<sup>67</sup> Drugs other than alcohol (e.g., marijuana and cocaine) have been identified as factors in 18 percent of motor vehicle driver deaths.<sup>68</sup>

Children of substance abusers may experience accidental injuries and may suffer from malnutrition or live in unhygienic conditions, increasing their risk of illness.

#### Children of Alcohol and Drug Abusers are at Greater Risk for Mental Health Problems

Children of substance-abusing parents tend to have two types of psychiatric disorders:

<sup>&</sup>lt;sup>\*</sup> The hardening of the arteries due to the build-up of fatty deposits called plaque, which can lead to stroke.

behavioral problems that are directed outward toward others such as attention deficit hyperactivity disorder, conduct disorder and oppositional defiant disorder; or, problems that are directed inward such as depression or anxiety.<sup>69</sup> Outwardly directed disorders are more commonly found in boys and inwardly directed disorders are more commonly found in girls. Both types of disorders have been linked to increased risk for substance use in children and teens.<sup>70</sup>

The boys had anger issues. As a direct result of my addiction, they were acting out in school. My daughter did just the opposite; she got straight A's and stayed in every afterschool activity she could so that she wouldn't have to come home and be the parent. So she did just the opposite, but she needed therapy too.<sup>71</sup>

--Imani Walker A mother in substance abuse recovery and Director of Sacred Authority, a network of mothers who have completed addiction treatment programs in Washington, DC

**Children of Alcoholics (COAs).** COAs are at increased risk for a range of mental health problems. The extent to which these problems develop depends on the severity of the family dysfunction and the extent to which other family members can compensate.<sup>72</sup>

Many alcoholics suffer from co-occurring psychiatric disorders, such as anxiety disorders or mood disorders.<sup>73</sup> COAs (particularly sons of alcoholics) tend to exhibit more stress and anxiety than that found in non-COAs,<sup>74</sup> increasing the likelihood that they will drink alcohol or use other substances in order to reduce their feelings of anxiety.<sup>75</sup>

COAs also have lower self-esteem than non-COAs,<sup>76</sup> and tend to have more impulsive personality traits, demonstrating greater sensation seeking and aggressiveness than non-COAs.<sup>77</sup> Preschool-aged COAs are likelier than non-COAs to be shy, perhaps due to a biological predisposition to anxiety or a home life that promotes fear and uncertainty.<sup>78</sup> The link between parental alcoholism and their children's mental health disorders could be due to the fact that alcoholism interferes with healthy parenting or that COAs are genetically predisposed to psychiatric disorders.<sup>79</sup> The frequency of psychiatric disorders among children with two alcoholic parents is distinctly higher than among those with one alcoholic parent.<sup>80</sup>

**Children of Illicit Drug Users.** Children of illicit drug abusers are likelier than children of non-drug abusers to demonstrate immature, impulsive or irresponsible behavior, to have lower IQ scores, more absences from school and to have behavioral problems, depression and anxiety--all signs of risk for substance abuse.<sup>81</sup> Children of drug-abusing parents, particularly drug-abusing mothers, are more likely to be disobedient, aggressive, withdrawn and detached.<sup>82</sup> These children also tend to have fewer friends, lower confidence in their ability to make friends and a greater likelihood of being avoided by their peers.<sup>83</sup>

#### Environmental Methamphetamine Exposure Puts Children at Risk

Exposure to methamphetamine in the home has become another health hazard for children. Socalled "mom and pop" labs for manufacturing the drug have spread from west to east and now can be found in every state on the East Coast (and in every Drug Enforcement Agency field division in the United States).<sup>84</sup>

The materials and chemicals used to make the drug are highly explosive and toxic and the fumes that emanate from the lab can cause significant physical damage or death. In 2003, 8,000 methamphetamine labs were raided; 3,300 children were found overall.<sup>85</sup> Forty-eight children were burned or injured and one was killed during lab explosions.<sup>86</sup>

It is not uncommon for adults who make the drug in their homes to store the materials or the drug itself in the kitchen, the garage or other parts of the home<sup>87</sup> where there is ample opportunity for children to access the drug and ingest it accidentally.

## Children of Substance Abusers are at Increased Risk for Substance Abuse

A large body of research indicates that all types of parental substance use, including smoking, drinking and illicit drug use, are associated with an increased risk that their children also will be substance abusers.<sup>88</sup>

#### **Environment and Genetics**

Through studies of adopted children and twins who have grown up in different environments, researchers have established that genetic factors play a role in the transmission of tobacco use, alcohol abuse and illicit drug use from parent to child.<sup>89</sup> Adopted children with alcoholdependent biological parents are at least twice as likely as other adopted children to develop alcoholism, providing evidence of a genetic link.<sup>90</sup>

Family, friends and the community have much to do with whether a child decides to use or experiment with substances. However, once a child has begun to smoke, drink or use drugs, genetic factors influence the transition from use to abuse.<sup>91</sup> Similarly, the ability to tolerate a substance, for example, without becoming impaired may be strongly influenced by genetic makeup, and may in turn contribute to a propensity to abuse that substance.<sup>92</sup> Early onset alcoholism with severe symptoms and the need for extensive treatment has a substantial genetic basis.<sup>93</sup>

#### **Children** of Alcoholics

There are an estimated five million children living with their alcohol-abusing or dependent parent in the United States.<sup>94</sup> Other research suggests that almost ten million children under age 18 live with an adult with a past-year diagnosis of alcohol abuse or dependence and more than 28 million live with an adult who has at one point in his or her lifetime been diagnosed with alcohol abuse or dependence.<sup>\* 95</sup>

COAs are approximately four times likelier than non-COAs to use alcohol or develop alcoholrelated problems.<sup>96</sup> COAs tend to initiate alcohol use earlier and engage in problem drinking at a younger age than non-COAs.<sup>97</sup> It is not clear from existing research the extent to which COAs' greater susceptibility to alcohol problems is a function of parental alcoholism or a result of other mental health problems.<sup>98</sup>

COAs have more positive beliefs and expectations than non-COAs about the effects of alcohol<sup>99</sup> and experience increased feelings of pleasure and relaxation, decreased muscle tension and decreased feelings of intoxication at the same blood alcohol levels as non-COAs.<sup>100</sup> This reduced impairment from drinking often is associated with future problems with alcohol.<sup>101</sup>

<sup>\*</sup> In this study, 70 to 83 percent of the children were the biological, foster, adopted or stepchildren of the alcohol-abusing or dependent adults. Ten to 20 percent were adult siblings or other biological relatives, and the rest were non-relatives or had an unspecified relationship with the alcohol-abusing or dependent adult.

Family members of substance abusers often live in constant fear that their fragile environments could collapse.<sup>1</sup> Families affected by substance abuse tend to be characterized by financial difficulties, marital problems, shifting family roles, increased exposure to illness, domestic violence, child abuse or neglect, children's academic problems, inconsistent childcare, social isolation and exposure to crime.<sup>2</sup> All of these factors also increase the risk that children growing up in these families will turn to tobacco, alcohol or drugs. Children who grow up in substance-abusing households may never learn how a healthy family functions and may end up perpetuating the intergenerational cycle of addiction and its consequences.

## **Financial Problems**

Substance abusers are at greater risk for job instability, long-term unemployment and accidents or injuries at work,<sup>3</sup> often putting their families under tremendous financial pressure. Workers who report heavy alcohol or drug use in the past month are more likely than those who do not to have worked for three or more employers in the past year and to have skipped work more than two days in the past month.<sup>4</sup> Family members may have to work harder to compensate for the substance abuser's lost wages due to job loss, incarceration or hospitalization. Even in less extreme cases, the family's economic health may suffer from the diversion of family funds to support a smoking, drinking or drug use habit.

Families of substance abusers who seek treatment face out-of-pocket costs as well. In 2002, 44 percent of substance abusers who received treatment paid for a portion of it from their savings or earnings and another 17 percent received at least some portion from family members.<sup>5</sup> The potential costly outcomes of a substance abuse related unintended pregnancy or sexually transmitted disease are additional sources of financial burden that may be placed on families of substance abusers.

#### Economic Consequences of Smoking

The annual cost of cigarettes for a pack-a-day smoker ranges from approximately \$1,172 in Colorado to \$2,117 in New Jersey; the average cost across the country is \$1,431.<sup>6</sup> Women-who tend to live longer than men--and those who smoke more heavily<sup>\*</sup> incur greater costs.<sup>7</sup> Another analysis of 5,689 adult healthcare plan enrollees from 1995 to 1996 found that former smokers' healthcare costs were about 26 percent higher from 1995 to 1996 than costs for people who never smoked.<sup>8</sup> Current smokers had 18 percent higher medical charges than nonsmokers.<sup>† 9</sup>

Prenatal and environmental exposure to tobacco also contributes to increased costs for individual families due to higher taxes and health insurance premiums. According to one study, for each one-percent drop in the smoking rate among pregnant women, 1,300 low birth weight live births would be prevented and health insurance plans would save \$21 million within one year.<sup>10</sup> At least eight percent of total pediatric medical spending may be attributable to parental smoking. The total cost associated with parental smoking for tobacco-related pediatric illnesses (5.4 million cases) was approximately \$4.6 billion and estimated loss-of-life costs were \$8.2 billion in 1997.<sup>11</sup>

### Economic Consequences of Alcohol Abuse

Alcohol-related injuries and fatalities place the family under economic strain due to healthcare expenditures, missed workdays and potential job loss. A study of the health insurance records of 595 children of alcoholics (COAs) found that their inpatient hospitalization rate was 24.3 percent higher, their average length of stay was 28.8 percent longer and the hospital charges incurred were 36 percent higher than non-COAs. The inpatient admission rate among COAs was nearly triple that of non-COAs for substance abuse and nearly double for mental disorders. In addition, the rate of inpatient hospital admissions among COAs was more than 50 percent higher for injuries and poisonings and more than 40 percent higher for asthma than that of non-COAs.<sup>12</sup>

## Cost of Caring for Substance-Abusing Family Member

Direct costs of assistance to adults with substance abuse and other psychiatric problems include time, money and in-kind contributions. Indirect costs may include lost career opportunities, psychological or social stress and stress-related illnesses for other family members as well.<sup>13</sup> For example, time spent helping a substance-abusing family member can reduce time available for work, which may reduce family earnings.<sup>14</sup>

While many parents provide financial and other forms of assistance to their adult children, parents of adult children with substance abuse and other mental health problems report giving significantly more money and time compared to other parents.<sup>15</sup> The estimated value of assistance to adult children with substance abuse and other psychiatric problems ranges from \$8,489 to \$13,891 per year, compared with costs of \$3,547 to \$4,279 for parents of adult children without comparable problems.<sup>16</sup> Families of adult children with substance use and other psychiatric disorders spend almost 16 percent of the average family income on assistance, compared to the six percent spent on adult children of other families. They also spend more time assisting the substance-abusing adult child--an average of 21.2 hours over a two-week period compared to 12.5 hours for other families.<sup>17</sup>

<sup>&</sup>lt;sup>\*</sup> More than a pack a day.

<sup>&</sup>lt;sup>†</sup> The higher rate associated with former smokers compared to current smokers may be due to the fact that people who quit smoking tend to be those with health problems.

## Marital Dissatisfaction and Increased Risk of Divorce

Substance abuse in the family increases the likelihood of unhappy marriages and divorce. One study analyzed data on alcohol consumption and divorce rates and found that a consumption increase of one liter of alcohol per capita brings about an increase in the divorce rate of about 20 percent. Similarly, the study found that an increase of .001 in the divorce rate leads to a 10 percent increase in alcohol expenditures.<sup>18</sup> According to another study, divorced and separated adults were more likely to be current or past smokers compared to married, widowed or never married adults.<sup>\* 19</sup>

Even when substance abuse does not end a marriage, it can affect its quality. Alcoholic men are more likely than non-alcoholic men to have poorer relations with their wives.<sup>20</sup> Male alcoholics and their wives report less sexual satisfaction and more sexual dysfunction, particularly with regard to reports of impotence.<sup>21</sup>

#### Marital Influences on Spouses' Drinking Patterns

Children aren't the only ones affected by a family member's substance use. Studies exploring the drinking patterns of couples over the transition to marriage find similar drinking patterns between husbands and wives.<sup>22</sup> This might be because people tend to marry others who are similar to them or because husbands and wives share similar life experiences that influence their drinking in similar ways.

The connection between substance abuse and divorce is intergenerational. For example, COAs are likelier than other children to never have been married, to cohabitate with a partner and to have been divorced.<sup>23</sup> Parental alcoholism is related to a 50 percent greater likelihood of marriage, perhaps because COAs

are likely to try to escape their dysfunctional home environments.<sup>24</sup> Yet, marriages of COAs are less stable and satisfying than marriages of non-COAs, in part due to low self-esteem in one or both partners, lack of time spent together and because of substance use in the marriage.<sup>25</sup>

Marriage often serves a protective function against substance abuse. Married smokers are more likely than unmarried smokers to quit smoking successfully, perhaps because of the social support often available from a spouse,<sup>26</sup> and heavy drinking is reduced among newly married couples whereas it is increased among the newly divorced.<sup>27</sup>

## Divorce Increases Children's Risk for Substance Abuse

Children whose parents are divorced are likelier than children from two-parent homes to engage in substance use and to report having substanceusing friends.<sup>28</sup> A study of sixth and seventh graders found that 54 percent of children of divorced parents drink compared to 36 percent of children of parents who had never divorced.<sup>29</sup>

My view to research that shows that there's an increased risk associated with single parenting, divorce and so forth, is not an excuse to shame families or to take supports away from families, but to provide greater support to those families, to provide greater services.<sup>30</sup>

--Wade F. Horn, PhD Assistant Secretary Administration for Children and Families U.S. Department of Health and Human Services

Divorce or separation might make a child more susceptible to substance use in several ways. The stress of a divorce on the family can reduce the bond between children and parents, making children more vulnerable to peer influence.<sup>31</sup> Single-parent families may be less cohesive and less involved in children's activities relative to two-parent families.<sup>32</sup> Two-parent families are likelier than other types of families--single parent or stepfamilies--to monitor children and provide consistent discipline.<sup>33</sup> A divorce in the

<sup>\*</sup> A likely explanation for these findings is that personal characteristics or early life experiences predict both smoking initiation and divorce.

family also often coincides with a change in lifestyle, which could involve reduced socioeconomic standing, a geographic move or less support and attention from preoccupied parents.<sup>34</sup>

Clearly, not all divorces will lead to a child's smoking, drinking or drug use. Some research supports the idea that youth substance use is affected more by family attachment and relationships than by family structure.<sup>35</sup> Children may better be able to avoid substance use when in a nurturing single-parent home than when in a dysfunctional intact home.<sup>36</sup>

## **Shifting Family Roles**

Members of a family often must change their conventional family roles or they may take on new, often-inappropriate roles in order to adapt to the unpredictable, unreliable and sometimes demanding behavior of the substance abuser in the family.<sup>37</sup> Substance abusers typically spend much of their time acquiring or using substances and often are incapacitated by the effects of the substances, leaving them unable to fulfill their responsibilities in the family. Family roles may be redistributed, such that some family members, especially children, might have to bear the burden of numerous family responsibilities as the addicted family member abdicates his or her traditional role.

A common phenomenon within families of substance abusers is the development of codependency.<sup>\*</sup> Codependents--often a spouse or partner--have a need to be depended upon by the addict. Codependents are characterized by a constant need for approval from others, difficulty in adapting to change, feeling overly responsible for the feelings and behaviors of others, indecisiveness, martyrdom, making excuses for the addict, denying problems, perpetuating crises and losing a sense of self.<sup>39</sup>

Those of us who are attracted to alcoholics are caretakers, nurturers. And we get our feelings of self worth not from who we are, but what we can do for other people.<sup>40</sup>

--Al-Anon<sup>†</sup> member CASA Focus Group (2000)

When a spouse enables the substance abuser to continue with his or her destructive behaviors, it further contributes to an already unstable environment that results in negative outcomes for children. Moreover, a parent who refuses to confront the problem of a spouse's substance abuse runs the risk of "normalizing" dangerous substance use behaviors for children, making them more likely to engage in substance use themselves.

Another common phenomenon seen in some families of substance abusers is known as parentification.<sup>41</sup> Parentification occurs when children assume adult roles or responsibilities that the substance-abusing parent may have given up--roles that children often are not developmentally or emotionally prepared to manage successfully.<sup>42</sup> Parentification can have profound effects on children, contributing to substance use, emotional distress and problem behaviors such as inappropriate sexual behaviors and conduct problems.<sup>43</sup>

...the oldest became a mother to the middle one and the youngest one. And she would really take care of them...giving up that role was hard for her.<sup>38</sup>

> --Al-Anon member CASA Focus Group (2000)

<sup>\*</sup> Some researchers object to the term codependency because it lacks a valid research-based definition (Sandoz, 2004) and because the term implies that the spouses of substance abusers - often wives - are in some way sick themselves. Others have suggested that future research focus on enabling behavior (Rotunda & Doman, 2001) or behavior that has the potential to increase a spouse's substance use, either directly or by preventing naturally occurring consequences of substance abuse from affecting the abuser (Rotunda & Doman, 2001).

<sup>&</sup>lt;sup>†</sup> Al-Anon is a mutual support group for families and friends of alcoholics. (See Chapter V) Al-Anon members speak from their own personal experience, and their comments do not necessarily reflect the views of all Al-Anon members.

While some children become overly serious, mature and well-organized in an attempt to protect the family and bring about some sense of normalcy, consistency and organization to their chaotic lives, others become high sensationseekers (a characteristic associated with substance abuse), either due to modeling or in an attempt to gain attention from others.<sup>44</sup> Sensation-seeking children are at increased risk of becoming involved in substance use and other problem behaviors.<sup>45</sup>

### **Increased Exposure to Illness**

Children of substance abusers are likely to be exposed to parental health problems and to bereavement and loss. For example, children of injection drug users are at increased risk for losing a parent to AIDS, hepatitis or overdose.<sup>46</sup> Children must learn to cope not only with the difficulties associated with having a substanceabusing parent, but also with the hardships and sadness associated with having a terminally ill parent. These children are in a particularly difficult situation, primarily because they often have to face their problems without social or professional support, due to the stigma associated both with substance abuse and its related illnesses such as AIDS.

## **Partner Violence**

Partner violence is related to increased levels of alcohol and drug abuse in both the aggressor and the victim. It makes it likelier that children will engage in substance use as well due to the trauma and stress of witnessing or suffering from violence in the household.<sup>47</sup>

...I found out later that [the family member] was in a blackout...[the family member] started whacking me on the head...[the family member] lost control and went to choke me...grabbed my throat and threw me to the ground.<sup>48</sup>

> --Al-Anon member CASA Focus Group (2000)

Alcohol and drug abuse in men are associated with an increased risk of inflicting injury on a partner.<sup>49</sup> One study of substance-abusing men in treatment found that the risk of partner violence increased by eight to 11 percent on days when men drank alcohol compared to days they did not.<sup>50</sup> This study also found that on 72 percent of days when an episode of severe violence occurred, the men drank or used drugs, usually within two hours of the abuse.<sup>\* 51</sup> Moreover, wives who have been abused report more severe violence when their husbands have been drinking compared to when they have not.<sup>52</sup>

Women who abuse substances are more likely to be victims of partner violence.<sup>53</sup> Women who abuse alcohol<sup>†</sup> are likelier to have an object thrown at them or to be pushed, grabbed or slapped.<sup>54</sup> One study found that 46 percent of women who had been severely assaulted reported being drunk one or more times in the past year compared to 16 percent of women who were not victims of abuse.<sup>55</sup> Another study found that women who use drugs are more likely than other women to enter a new violent relationship and those who use drugs other than marijuana are more likely to experience psychological aggression and violence from their partners.<sup>56</sup>

The risks of homicide and suicide for substance abusers and the risk of homicide for individuals living with a substance abuser are greater than they are for individuals not exposed to substance abuse in the home.<sup>57</sup> One study that assessed the risk factors for the violent death of women in the home found that illicit drug use by a member of the household (usually a spouse, intimate acquaintance or close relative) was a significant predictor of homicide.<sup>58</sup>

The link between substance abuse and partner violence can be explained in several ways. Substance abuse may interfere with effective

<sup>\*</sup> This was true of men in treatment who reported at least one act of violence toward a female in the past year.

<sup>&</sup>lt;sup>†</sup> Defined in this study as one or more episode of drunkenness in the past year.

communication and increase aggressive tendencies, heightening the risk for conflict and violence. In addition, substance abuse impairs judgment, which may cause people to act irrationally or place themselves in potentially dangerous situations.

A possible response to experiencing partner violence may be to engage in substance abuse. Psychological aggression and violence can contribute to relationship dissatisfaction that in turn can contribute to heavy substance use.<sup>60</sup> One study found that among low-income single mothers, violence by a partner led to a three-fold greater risk of later drug use, regardless of the women's previous levels of drug use.<sup>61</sup>

Some individuals who grow up in violent, substance-abusing families tend to mimic their parents' violent behaviors as adults.<sup>62</sup> For example, sons of male violent alcoholics are at increased risk of abusing their wives, while daughters of female violent alcoholics are at increased risk of being battered wives or of becoming violent alcoholics themselves.<sup>63</sup>

## Children of Substance Abusers are at Risk for Abuse and Neglect

Children of substance abusers often are neglected or abused.<sup>64</sup> CASA's report, *No Safe Haven: Children of Substance Abusing Parents* estimates that substance abuse is a factor in at least 70 percent of all reported cases of child maltreatment.<sup>65</sup> Adults with substance use disorders are 2.7 times likelier to report abusive behavior and 4.2 times likelier to report neglectful behavior toward their children.<sup>66</sup> Forty percent of the adults reporting physically abusive behavior and 56 percent of the adults reporting neglectful behavior met clinical diagnostic criteria for substance use disorder at some point in their lifetime.<sup>67</sup>

Alcohol and drugs can lead to anxiety, paranoia and hallucinations, increasing the risk that the substance abuser will behave in an unstable or overly aggressive manner toward his or her child.<sup>68</sup> Substance-abusing mothers may have exposed their children prenatally to substances, which might make their children have more behavioral problems,<sup>69</sup> putting them at greater risk for abuse or neglect. Substance-abusing mothers often are overly punitive in disciplining their children.<sup>70</sup>

If their dad beats up Mom, what are the children learning? The young girl learns it's okay to get beat up by your husband; and then the young boys in the house have learned that it's okay to beat up your wife...If you don't treat domestic violence along with the substance abuse, I think you're missing the boat.<sup>59</sup>

--Robert J. Meyers, PhD Research Associate Professor of Psychology Clinical Research Branch Center on Alcoholism, Substance Abuse and Addiction University of New Mexico

## Abuse and Neglect Increases Children's Risk for Substance Abuse

Childhood maltreatment, including sexual and physical abuse, increases the chances that a child will smoke, drink or use drugs.<sup>71</sup> One study found that teens who were the victims of both physical and sexual abuse were over five times likelier than other teens to smoke, over three times likelier to drink and over 10 times likelier to use illicit drugs.<sup>72</sup> Sexually abused teens report significantly more anxiety, loneliness and depression than non-abused teens,<sup>73</sup> all of which are significant risk factors for substance use and abuse. Abuse by family members also may propel children to join deviant peer groups where substance use is more prevalent. Smoking, drinking or drug use are coping strategies used to escape from painful childhood experiences and serve as a means of selfmedicating feelings of isolation and loneliness.<sup>74</sup> The more negative experiences a child has with abuse and household dysfunction, the higher that child's risk of smoking, drinking and using drugs in adulthood.75

### **Trouble in School**

While some children affected by parental addiction may mask the confusion, isolation and fear that dominates their lives by becoming high achievers in school, many others are at risk for academic problems because of the unstable home environments associated with parental substance abuse.<sup>76</sup>

If the home environment is chaotic or stressful, children may have greater difficulty studying or completing their homework. Furthermore, children of substance abusers often receive less supervision, encouragement, support and attention from their parents, resulting in their frequent absence from school, tardiness, being poorly clothed or fed and receiving less intellectual engagement and assistance with schoolwork from their parents.<sup>77</sup>

If a parent is spending a lot of time...looking for drugs and alcohol, they're maybe not spending that time doing homework or making sure the child puts the homework in the folder to go back or sign their parent consent form to go for their field trip--the child will have some difficulties in school.<sup>78</sup>

> --Jodi E. Star, MD Assistant Professor Department of Psychiatry University of Florida at Gainesville

Children of substance abusers are likelier than other children to have poor academic achievement, change schools more frequently and have to repeat a grade.<sup>79</sup> They also have been found to achieve a lower class rank in high school and perform more poorly on college entrance exams than other children.<sup>80</sup> Difficulties in school are associated with increased risk of low self-esteem, peer rejection, associations with troubled or deviant peers<sup>81</sup> and substance use.<sup>82</sup>

### High Turnover in Childcare

Parental substance abuse can result in significant changes in the primary caregivers of children; one study found that increased turnover in parental figures<sup>\*</sup> is associated with higher levels of delinquency in both girls and boys and drug use in girls.<sup>83</sup> Children of cocaine-using mothers are more likely to stay in foster care for longer periods, experience many changes in primary caregivers and have less access to male caregivers than other children.<sup>84</sup> Seventy percent of children whose mothers are in treatment for opioid addiction experience some kind of turnover, either in the form of a parent or parent figure leaving their lives.<sup>85</sup>

## Stigma and Social Isolation

Substance-abusing families tend to be less involved in social, religious and cultural activities.<sup>86</sup> Families of substance abusers may experience self-imposed isolation or they may be ostracized from the community. As a result, many children suffer in silence, partly due to efforts to maintain secrecy or deny or ignore the problems associated with parental substance abuse and partly because of community rejection and prejudice.<sup>87</sup> One result of such isolation is less availability of help and support, which further increases the family's stress. Another result is that if children do develop substance abuse problems due to the difficulties of their home lives, they are less likely to get support from helpful adults or the community. In this atmosphere of stress and anxiety, children may become withdrawn and uncommunicative, making them more vulnerable to isolation and loneliness.<sup>88</sup> Also because of this isolation. children of substance abusers tend to have fewer opportunities to interact with other children and thus have fewer age-appropriate social skills.

<sup>\*</sup> This study examined parents receiving methadone treatment.

#### Stigma and Social Isolation Interfere with Children's Academic and Social Success

Teachers' and peers' expectations and attributions about the abilities of children known to have substance-abusing parents may affect the children's academic progress and their social relationships.<sup>89</sup> Teachers of children known to have substance-abusing parents may have lower academic expectations for those children and may attribute much of the children's performance to their parents' drug use. Such attributions might make the teacher treat that student differently from how he or she treats other students, contributing to a sort of selffulfilling prophecy where the child's academic progress suffers primarily because of others' expectations of him.<sup>90</sup> Such self-fulfilling prophecies are common in educational settings and can have long-lasting effects on children.<sup>91</sup>

Similar effects can occur with regard to the peers of children of substance abusers who also may label the child as troubled or difficult. These children's peers may avoid contact with them or interact with them in a way that can be detrimental to their ability to do well in school.<sup>92</sup>

## **Exposure to Crime**

Children of substance abusers are more likely to have undue exposure to crime and the criminal justice system which may result in inappropriate knowledge about criminal activity and, in some cases, resentment and ill will toward legal authorities.<sup>93</sup> Children with alcoholic parents are two to three times likelier than other children to have had a family member incarcerated while they were growing up.<sup>94</sup> The high levels of exposure of children of illicit drug users to druguse and other criminal activity<sup>95</sup> can hamper their moral development, normalizing criminal activities and hiking the chances that they too will use drugs.

## Unstable Family Environments Contribute to Children's Substance Use

Stress, depression, anxiety and feeling unable to confide in parents--common by-products of living with an addicted parent--may increase the likelihood that children will engage in substance use in an attempt to relieve their negative feelings.<sup>96</sup> Indeed, recent research indicates that a cycle of problems can develop where poor family relationships lead to substance use and then substance use aggravates the existing family problems, leading to more substance use.<sup>97</sup>

I was scared to death. I didn't know what in the world was going to ensue that night, whether we would be in a good mood or not in a good mood... I guess fear would be the biggest emotion that I had at that time.<sup>98</sup>

> --Al-Anon member CASA Focus Group (2000)

Perhaps a good marker of the level of instability in substance-abusing households is that children from these families tend to leave home earlier than other children and are more likely to do so because they are unhappy than because they are pursuing educational or job opportunities.<sup>99</sup> In extreme cases, children might resort to running away. Running away itself is associated with alcohol use as well as twice the risk of marijuana and other illicit drug use among teens.<sup>100</sup>

## Chapter IV What Parents Can Do To Prevent Children's Substance Use and Abuse

In 2003, 27.5 percent of high school students admitted to using tobacco, 44.9 percent admitted to drinking alcohol and 22.4 percent admitted to using marijuana in the past month.<sup>1</sup> CASA's 2004 annual survey of teens and their parents estimates that 55 percent of teens ages 12 to 17 are at moderate to high risk<sup>\*</sup> for substance abuse.<sup>2</sup> In light of these high rates, and the significant role of families in determining whether or not a child will engage in substance use, it is important for parents to understand what they can do to help prevent their children from using tobacco, alcohol or drugs.

## **Model Responsible Behaviors**

Children form their beliefs about substance use more on the basis of their parents' actions than on the basis of their parents' words.<sup>3</sup> Parents who leave cigarettes, alcohol, drugs or drug paraphernalia around the house are in effect putting these substances into the hands of their children.

The good news is that children also imitate parents' healthy behavior. For example, teens whose parents have given up smoking are more likely to quit or avoid smoking entirely;<sup>4</sup> the earlier that parents quit smoking, the less likely their children are to become smokers when they reach adolescence.<sup>5</sup> Parents who smoke only outdoors or who request non-smoking sections in restaurants are more likely than other smoking parents to have children who do not smoke.<sup>6</sup>

Parents also can avoid teaching their children by their own behavior that alcohol use is the way to relax or that excessive drinking is fun. Too many parents look the other way or even provide

<sup>\*</sup> Risk scores are calculated according to teens' survey responses to questions about past use of substances, current use of substances, friends' use of substances, attitudes about substance use and admitted likelihood of using substances in the future.

alcohol to their children for personal use or for parties. Research indicates that although most teens who drink obtain alcohol from their friends and/or at parties,<sup>7</sup> children's homes and family members are common sources of alcohol, especially for younger children.<sup>8</sup> A recent study of sixth, ninth and twelfth graders found that one-third of the sixth and ninth graders were getting alcohol from their own homes.<sup>9</sup>

I had one family [who] refused to stop drinking at home, but wanted their son to stop doing pot. When we said, "look, the example that you're setting is that you're stabilizing moods by something foreign," they said, "Well, we're only drinking."<sup>16</sup>

--Ralph I. Lopez, MD Professor of Pediatrics, Attending Physician Weill-Cornell Medical Center

## Monitor Children's Whereabouts, Activities and Friends

There is strong evidence that adolescents who are closely supervised and monitored by their parents are less likely than other, less supervised teens to smoke, drink or use drugs.<sup>10</sup> Monitoring activities include getting to know children's friends and discussing strategies to avoid or handle situations where peers are using tobacco, alcohol or drugs. If parents are very familiar with their children's friends, pastimes and daily whereabouts, they are likelier to be able to prevent risky situations and to intervene if necessary. For instance, sixth, seventh and eighth graders are five times likelier to drink if they have two or more friends who drink.<sup>11</sup>

Unfortunately, too many parents are unaware of what their children are doing and with whom they are doing it. One study found that one-third of teens whose parents think they do not drink in fact do drink.<sup>12</sup> Another study of teens who reported regular alcohol use revealed that only 29 percent of mothers and 31 percent of fathers were aware that their teen used alcohol.<sup>13</sup>

Girls are more likely to be monitored by their parents than are boys.<sup>14</sup> Because boys tend to

report higher levels of peer pressure to use cigarettes, alcohol and drugs, lower levels of monitoring and support could contribute to the slightly higher rates of substance use among boys during the mid to late teen years.<sup>15</sup>

Children left alone to take care of themselves for extended periods of time are at great risk for heavy drinking and drinking to intoxication.<sup>17</sup> "Latchkey children," who take care of themselves after school hours, are almost four times more likely to have gotten drunk in the past month than non-latchkey children.<sup>18</sup>

Although parental supervision and monitoring is important, parents who use inappropriate methods or excessive degrees of control can make their children more vulnerable to substance use. Teens whose parents are coercive--characterized by parental actions such as hitting, threatening and yelling--are more likely than teens without coercive parents to engage in substance use.<sup>19</sup> Coercion, extreme strictness and autocratic parenting put children at equal or greater risk for substance use as do overly lenient parenting behaviors.<sup>20</sup>

## Know if Your Child is at Particularly High Risk

Some disorders, behaviors and times are particularly risky for children and teens in terms of substance use and abuse. Parents can monitor their children more effectively if they know what to look for.

#### **Co-occurring Disorders**

Certain problems commonly co-occur with substance abuse in teens. For instance, CASA's White Paper, *Food for Thought: Substance Abuse and Eating Disorders*, found that individuals with eating disorders are up to five times likelier to abuse alcohol or illicit drugs and those who abuse alcohol or illicit drugs are up to 11 times likelier to have eating disorders.<sup>21</sup> Teens with eating disorders might use substances to try to keep their weight down, or might both use substances and engage in disordered eating to cope with feelings of anxiety or depression.<sup>22</sup>

Another CASA White Paper, *Substance Abuse* and Learning Disabilities: Peas in a Pod or Apples and Orange?, showed that learning disabilities and substance use in teens share many of the same precipitating factors: low selfesteem, academic difficulty, loneliness, depression, and the desire for social acceptance. Moreover, prenatal exposure to substances may increase the risk of substance use, learning disabilities and behavioral problems.

A recent CASA Report, *The Formative Years: Pathways to Substance Abuse Among Girls and Young Women Ages 8-22*, revealed that conduct disorder, depression and anxiety all increase the risk for substance use among teens. For example, 17-year old girls with conduct disorder are four times likelier to use substances and boys with conduct disorder are two and a half times likelier to use substances.<sup>23</sup> Teenage girls with depressive symptoms are twice as likely to smoke, drink and use drugs as those who are not depressed.<sup>24</sup>

Parents whose children are experiencing any of these problems should be alert for symptoms of substance abuse as well.

#### Dangerous Times

As teens age, they are more likely to use tobacco, alcohol and illicit drugs.<sup>25</sup> Eighteen percent of teens have smoked a cigarette, 28 percent have drunk alcohol (more than a few sips) and 10 percent have tried marijuana before age 13.<sup>26</sup> Compared to freshmen, seniors in high school are 50 percent likelier to smoke cigarettes (26.2 vs. 17.4 percent), 54 percent likelier to drink (55.9 vs. 36.3 percent) and 40 percent likelier to use marijuana (25.8 vs. 18.5 percent).<sup>27</sup> Twelve-year olds have an average risk score of 0.42--less than one-half the average for all respondents (1.00). By the time a respondent reaches age 17, the average substance abuse risk score increases nearly fourfold, to 1.63.<sup>28</sup>

With increasing age also come increasingly risky social situations. For instance, between ages 15 and 16, there is a significant jump in the percentage of parties at which marijuana is available (35 percent vs. 55 percent).<sup>29</sup> Between ages 12 and 16, the percentage of teens who have close friends who use marijuana increases 1,000 percent (from six to 61 percent).<sup>30</sup>

CASA also has shown that certain transitional periods can be risky for teens--from elementary to middle school, from middle to high school and from high school to college. In *The Formative Years: Pathways to Substance Abuse Among Girls and Young Women Ages 8-22*, CASA found that the greatest increase in smoking, drinking and marijuana use occurs during the transition from high school to college. Transitioning between schools also can be risky for teens: teens who frequently move from one neighborhood or home to another are more likely than teens who do not to report tobacco, alcohol and marijuana use.<sup>31</sup>

#### Other Factors That Increase Risk

CASA's annual surveys of American attitudes on substance abuse have identified a number of other key risk factors for substance abuse among teens. Parents should be alert to these factors when talking with their teens, setting limits and monitoring their actions:

- Teens who smoke are at nearly three times the risk for illicit drug use, drinking teens are at two and a half times greater risk, and teens who both smoke and drink are at four and a half times greater risk.<sup>32</sup>
- Teens' academic performance is predictive of their risk: teens who typically receive grades of C or lower are at twice the risk of those receiving A's and B's.<sup>33</sup>
- Half of high school students and nearly one quarter of middle school students go to schools where drugs are used, kept or sold. Students attending middle schools where drugs are used, kept or sold are at two and one-half times the risk for substance abuse,

and students attending high schools where drugs are used, kept or sold are at one and one-half times the risk compared to students attending drug-free schools.<sup>34</sup>

- Teens' after-school activities may increase their risk. Teens who come home and do their homework are at less risk than teens who hang out with friends after school or who go to a job.<sup>35</sup>
- Twenty-six percent of teens rate themselves as feeling high stress. High stress teens are twice as likely as low stress teens to smoke, drink, get drunk and use illegal drugs.<sup>36</sup>
- Frequent boredom increases risk by 50 percent.<sup>37</sup>
- Teens with an excess of \$50 in spending money each week are more than twice as likely to have tried cigarettes, alcohol or marijuana compared to teens with \$15 per week or less. Thirty-four percent of parents underestimate the amount of money their teens have to spend.<sup>38</sup>
- Teens who spend 25 or more hours per week with a boyfriend or girlfriend are two-andone-half times likelier to smoke cigarettes, five times likelier to get drunk and four-andone-half times likelier to smoke marijuana than teens who spend less than 10 hours per week with their girlfriend or boyfriend.<sup>39</sup> (Table 4.1)

Table 4.1
Percent of Teens Using Substances by
Time Spent with Boy- or Girlfriend

	25+ Hours	<10 Hours	
Smoke Cigarettes	45%	17%	
Get Drunk	35	7	
Try Marijuana	55	12	
Source: CASA. (2004).			

• Girls with boyfriends two or more years older are twice as likely to drink, six times likelier to get drunk, six times likelier to have tried marijuana and four and one half times likelier to smoke than girls with boyfriends less than two years older or without boyfriends.

• Having sexually active friends also increases a teen's substance abuse risk. If half or more of a teen's friends are sexually active, he or she is six and one-half times likelier to drink, 31 times likelier to get drunk, more than 22 times likelier to have tried marijuana and more than five and one-half times likelier to smoke.<sup>40</sup>

## Set Rules and Expect Children to Abide by Them

Consistent messages of parental disapproval of substance use are strongly linked to lower rates of children's substance use.<sup>41</sup> Four times as many teens (44 percent) who say their parents wouldn't particularly disapprove of their smoking one or more packs of cigarettes a day are current smokers compared to teens who say their parents would strongly disapprove (9.4) percent). Nearly three times as many teens (41 percent) who say their parents wouldn't particularly disapprove of their having one or two alcoholic drinks nearly every day currently use alcohol compared to teens who say their parents would strongly disapprove (15 percent). Five times as many teens (30 percent) who say their parents wouldn't particularly disapprove of their trying marijuana once or twice are current marijuana users compared to teens who say their parents would strongly disapprove (six percent).42

Unfortunately, many parents view teen substance use as something they are powerless to stop. Forty-one percent of parents think that drug use by their teenage child is likely, while only 11 percent of teens think so.<sup>43</sup> Teens whose parents think future drug use is "very likely" are more than three times likelier to smoke, drink and use illegal drugs than teens whose parents say future drug use is "not likely at all."<sup>44</sup>

Too often, parents not only fail to set clear rules and expectations but actually are quite permissive about their children's substance use. Twenty-five percent of 15- to 17-year olds have attended a party in the past two years at which parents purchased alcohol for them or served alcohol to them.<sup>45</sup> One study found that fifth graders who were permitted to drink alcohol in the home were twice as likely to be current alcohol users two years later than those who were not permitted to drink alcohol in the home.<sup>46</sup> Only 23 percent of parents explicitly prohibit their children from using alcohol before they reach 21.<sup>47</sup>

I think most parents of my generation will want to excuse their own behavior and say, "Well, I did it. It can't be that bad." And you're not helping your kid if you do that. I think you help your kid if you explain to them what it does to you.<sup>48</sup>

> --Cynthia Kuhn, PhD Professor of Pharmacology and Cancer Biology Duke University Medical Center

## Foster Positive and Supportive Relationships with Children

CASA's survey of teens, *Back to School 1999 – National Survey of American Attitudes on Substance Use V: Teens and Their Parents*, found that those teens with an excellent relationship with either parent were at 25 percent lower risk for substance use than the average teen; those with excellent relationships with both parents were at 40 percent lower risk.<sup>49</sup>

Children who grow up in caring and supportive family environments, in which parents have high expectations of their children and encourage their children's participation in family routines and rituals, are less likely to abuse substances.<sup>50</sup> Parental praise, affection, acceptance and family bonding--as perceived by children--all are associated with reduced risk of substance use.<sup>51</sup> Parental support also is linked to teens' belief that their families are strong, durable over time and can cope well with stressful life events; such beliefs are linked to reduced risk of substance use.<sup>52</sup> Parental support is important in reducing the risk that stressful life events--such as illness, death in the family or divorce--will lead to children's substance use. Parents also can reduce the tremendous impact of peer pressure through support and monitoring. Teens who value positive relationships with their parents and who are satisfied with those relationships report significantly less substance use than teens who do not.<sup>53</sup>

## Maintain Open Lines of Communication

Teens who have open lines of communication with their parents have lower levels of cigarette, alcohol, marijuana and cocaine use.<sup>54</sup> Parents can effectively discourage substance use, or prevent the progression of use, by talking about it and cautioning their children about the risks.<sup>55</sup> Parental communication of anti-drug beliefs can be effective in preventing substance use even when the anti-drug messages are delivered by a substance-using parent.<sup>56</sup>

Communication doesn't start when your child is 17, it should start when your child is three. So by the time your child is 17, there's a pattern of communication that has hopefully been going on for some time. ...The biggest problem is with parents who haven't set that pattern of communication up until that period of time, and so they don't have the tools, they don't know where to start to try to find out [if their child is using substances].<sup>57</sup>

> --Ross B. Brower, MD Deputy Medical Director Adolescent Development Program Weill Cornell Medical Center

According to CASA's survey, *Back to School 1999--National Survey of American Attitudes on Substance Abuse V: Teens and Their Parents*, nearly two-thirds of teenagers report having had a serious discussion with their parents about the risks of using illegal drugs.<sup>58</sup> Thirty-five percent of teens who have had such discussions with their parents said they learned a lot about the risks of illegal drugs from them and 30 percent said the discussion influenced their decision of whether to use drugs.<sup>59</sup> Furthermore, when asked what risks they associate with drug use, teenagers consistently rank "disappointing their parents" as a major risk.<sup>60</sup>

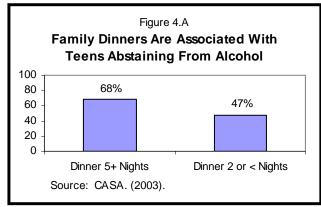
The good news is that many teens report that they want to talk to their parents about substance use and related problems. CASA's most recent annual survey of teens and their parents shows that drugs are teens' number one concern, above social and academic pressures and crime and violence.<sup>61</sup> Thirty percent of teens answered "substance use" when asked what they wished they could "honestly discuss with their parents at dinner."<sup>62</sup>

Findings from CASA's study, *The Formative* Years: Pathways to Substance Abuse Among Girls and Young Women Ages 8-22, also support the notion that parent-child communication is important in preventing substance use. The majority (61.6 percent) of girls surveyed who reported having conversations with their parents about substance use said that the conversations made them less likely to smoke, drink or use drugs.<sup>63</sup> Half the girls surveyed said that in the conversations with their parents about substance use, their parents told them things about tobacco. alcohol or illegal drugs that they did not already know and girls frequently cited their mothers as the most trustworthy source of information they had about substances of abuse.<sup>64</sup>

Girls generally tend to report better family communication than boys.<sup>65</sup> Throughout the teen years, girls communicate more frequently and more openly than boys with their parents, particularly with their mothers; frequent and open communication is associated with lower risk for substance use.<sup>66</sup> There also is some evidence that mothers' cautionary statements about substance use have more of an impact on girls than they do on boys.<sup>67</sup> In making decisions, girls report being more influenced by their mother's opinions, whereas boys report greater susceptibility to their father's opinions.<sup>68</sup> Furthermore, boys tend to view relationships with fathers as more supportive than do girls.<sup>69</sup> In addition to gender differences, there are marked racial/ethnic differences in teens' communication with their parents and in their perceptions of parental support and parental disapproval of substance use. For example, black teens are less likely than other teens to move from experimental to regular smoking, possibly because they tend to maintain communication with their parents and to perceive disapproval from their parents about smoking.<sup>70</sup> And black teens tend to perceive less parental approval of alcohol use than teens from other racial/ethnic groups.<sup>71</sup>

## Maintain Family Rituals, Such as Eating Dinner Together Regularly

CASA's research consistently demonstrates that teens who eat dinner with their families frequently<sup>\*</sup> are at half the risk of substance abuse as teens who have family dinners infrequently.<sup>† 72</sup> Teens who have dinner with their families five or more nights in a typical week are 45 percent likelier to report that they have never tried alcohol compared to teens who have dinner with their families two nights a week or less.<sup>73</sup> (Figure 4.A) And CASA's most recent teen survey shows that teens who have dinner with their families frequently (five to seven nights per week) also are less likely to have sexually active friends, to spend a lot of time<sup>‡</sup> with a girlfriend or boyfriend and--for girls--to have an older<sup>§</sup> boyfriend--all risk factors for substance abuse.<sup>74</sup>



<sup>&</sup>lt;sup>\*</sup> Five to seven nights per week.

<sup>&</sup>lt;sup>†</sup> Two nights a week or less.

<sup>&</sup>lt;sup>‡</sup> Twenty-five or more hours per week.

<sup>&</sup>lt;sup>§</sup> Two or more years older.

Family dinners may be difficult or disasterous in families where substance abuse is present. However, families who can sit down to a meal together despite the emotional stress and chaos that sometimes characterize their households can limit the impact of parental addiction on their children. For instance, in alcoholic families, children whose parents make an effort to regularly celebrate holidays and eat dinner together are less likely to have emotional or behavioral problems than children in alcoholic families with no routines or rituals.<sup>75</sup>

## Involve Other Family Members, Friends and Neighbors in Children's Lives; Be Sure Dad is Engaged

CASA's annual survey of parents' and teens' attitudes on substance abuse has shown that fathers are not as involved in the battle against substance abuse as they should be, and their lack of involvement increases the risk that their children will smoke, drink or use illicit drugs. The safest teens are those who live in a twoparent home with a positive and open relationship with each parent. Yet teens are more likely to report having an excellent or very good relationship with their mother compared to their father (71 vs. 58 percent), more likely to credit their decision never to use marijuana to their mother (29 vs. 13 percent) and more likely to have discussed the dangers of drugs with their mother instead of their father if they had the discussion with only one parent (15 percent vs. four percent).<sup>76</sup> In fact, children in a two-parent family with only a poor or fair relationship with their father are at 60 percent higher risk for substance abuse compared to children in a family headed by a single mother if they have an excellent relationship with their mother.<sup>77</sup> To reduce substance use risk in children, fathers need to become actively involved in their children's lives and open the lines of communication.

Parents are not the only adult role models that can positively influence children. Children who can look to other family members, friends and neighbors who serve as positive role models and

offer support and caring are at lower risk for substance use.<sup>78</sup> CASA's 2002 National Survey of American Attitudes on Substance Abuse VII: Teens, Parents and Siblings found that 67 percent of teens with an older sibling who say their older brothers or sisters would be "very angry" to find out they were using marijuana were at a substantially lower risk of substance abuse.<sup>79</sup> While supportive sibling relationships help protect against substance use, having a substance-using older sibling increases the risk.<sup>80</sup> Children with older substance-using or substance-approving siblings are more likely to smoke, drink and initiate drug use at younger ages than children with siblings who do not smoke, drink or use drugs.<sup>81</sup> Teens with an older sibling who believe that a sibling may have tried illegal drugs are one and a half times likelier to smoke, drink or use illegal drugs as the average teen.<sup>82</sup> Teens who report that an older brother or sister had offered them illegal drugs or encouraged their use are at almost twice the risk of substance abuse as the average teen.<sup>83</sup>

Caring and supportive neighborhoods and communities that provide positive role models, hold high expectations for achievement and encourage youth participation in events protect children from engaging in substance use.<sup>84</sup> For example, teens who believe that adults in their neighborhood would strongly disapprove if they used marijuana are less likely to do so than those who believe adults in their neighborhood would not care or would disapprove if they used marijuana (11 percent vs. 28 percent).<sup>85</sup>

Having a relative or adult other than parents to turn to can be particularly important for children of substance abusers whose own parents may not be able to provide the support they need. One study found that COAs with more sources of support, including aunts or uncles, older siblings, grandparents, teachers, mentors or family friends, were more likely to grow up to be adults without significant problems than COAs with less support.<sup>86</sup>

# **Incorporate Religion or Spirituality into Family Life**

Religious families are less likely to have children who use tobacco, alcohol or illicit drugs.<sup>87</sup> They also are likelier to have higher levels of family bonding.<sup>88</sup> Most of the research concerning reduced risk for substance use in teens concerns religion as opposed to spirituality,<sup>\*</sup> but research in the general population suggests that both religion and spirituality are linked to better health and increased chances of substance abuse recovery.<sup>89</sup>

Parental attendance at religious services and belief that religion is important are linked to lower rates of substance abuse in adults, which translates to lower rates of substance use in children.<sup>90</sup> Teens are likelier to be religious if their parents are and to attend religious services if their parents do.<sup>91</sup> Teens who never attend religious services are more than twice as likely to smoke, twice as likely to drink, more than three times likelier to binge drink and use marijuana and almost four times likelier to use other illicit drugs than teens who attend religious services at least weekly.<sup>92</sup>

#### 10 Steps Parents Can Take to Prevent Substance Abuse

- Set a good example;
- Know your child's whereabouts, activities and friends;
- Eat dinner together regularly;
- Set fair rules and hold your child to them;
- Be caring and supportive of your child;
- Maintain open lines of communication;
- Surround your child with positive role models;
- Incorporate religion or spirituality into family life;
- Learn the signs and symptoms of teen substance abuse and conditions that increase risk;
- If problems occur, get help promptly.

<sup>\*</sup> Spirituality is defined as a deeply personal and individualized response to God, a higher power or an animating force in the world, not linked to any organized set of religious beliefs.

Because substance abuse is so inextricably bound to the family--both in the family's contribution to substance abuse risk and in the consequences of substance abuse for the family--it is no surprise that each family member is integral to addressing the problem. Parents need to know where to turn for help if their children are at high risk or already are smoking, drinking or using drugs. Spouses need to know where to turn if their partners are abusing alcohol or drugs. Likewise, children need to know how to get help if their parents are suffering from substance abuse or addiction.

## Educate Yourself to Recognize the Signs and Symptoms of Substance Abuse

The first step in helping a family member who is at risk for substance abuse or who already is involved in substance abuse is to be able to spot the signs and symptoms. Although they vary across individuals and substances of abuse, common signs and symptoms exist for young people and for adults.

#### Signs and Symptoms of Risk for Substance Abuse in Young Family Members

Warning signs can indicate both experimental use *and* longer-term substance involvement. The following signs could indicate that a child may be involved in substance abuse:<sup>1</sup>

#### **Changes in Behavior:**

- Missing school, declining grades or discipline problems;
- Dropping old friends and getting new ones;
- Dropping activities such as sports;
- Increased secrecy;
- Unusual borrowing of money;

- Sudden mood changes, aggressiveness, irritability;
- Restlessness, excessively talkative, rapid speech;
- Irresponsible behavior, poor judgment;
- Depression;
- Forgetfulness, slurred speech or difficulty expressing thoughts;
- Lack of coordination, poor balance.

#### More Direct Evidence of Substance Use:

- Increased use of incense, room deodorant or perfume (to hide smoke or chemical odors);
- Increased use of eye drops (to mask bloodshot eyes or dilated pupils);
- New use of mouthwash or breath mints (to cover up the smell of alcohol);
- Drug paraphernalia such as pipes, rolling papers;
- Increased accumulation of inhalable products and accessories such as hairspray, nail polish, correction fluid, etc.;
- Missing prescription drugs--such as narcotics, stimulants and mood stabilizers.

Signs of substance abuse in a young person may be difficult to detect given the common presence of mood changes, erratic sleeping patterns and changes in hobbies or interests in many teens. A parent's best defense is an ongoing dialogue with teens concerning their friends and activities. Parents who wait until they notice warning signs might wait too long.

#### Signs and Symptoms of Risk for Substance Abuse in Adult Family Members<sup>2</sup>

#### **Changes in Behavior:**

- Abrupt changes in work attendance, quality of work, work output;
- Association with known substance abusers;
- Withdrawal from responsibility;
- Increased secrecy;
- Unusual flare-ups or outbreaks of temper;
- Deterioration of physical appearance and grooming;
- Fatigue, repeated health complaints;
- Being argumentative, withdrawing from the family;
- Stealing small items from employer, home or friends.

#### More Direct Evidence of Substance Use:

- Wearing sunglasses at inappropriate times (to mask bloodshot eyes); wearing long-sleeved garments particularly in hot weather (to mask needle marks);
- Lying, particularly about how much alcohol or other drugs one is using;
- Planning drinking in advance, hiding alcohol, drinking or using other drugs alone;
- Avoiding friends or family in order to get drunk or high;
- Pressuring others to drink or use drugs;
- Taking risks, including sexual risks;
- Problems with the law.

# Intervene Early with Children at High Risk

Certain children are known to be at high risk for substance abuse by virtue of their family history, their own emotional or behavioral problems, their peer group or their attitudes towards tobacco, alcohol or drugs. For these children, a number of early intervention programs exist that are aimed at preventing substance abuse before it starts or intervening before substance use turns to abuse. Several examples of these programs are presented below. Although some of these programs exist only in specific communities, they can serve as models for other schools or communities seeking to implement such services.

#### Substance Abuse and Mental Health Services Administration (SAMHSA) Model Programs

Evidence-based programs for intervening with high-risk youth can be found in a listing and description of "model programs" deemed by the federal government to be proven or promising in reducing substance abuse and other problem behaviors among youth.<sup>3</sup> (http://model programs.samhsa.gov/) These model programs have been tested in communities, schools, social service organizations and workplaces across the U.S. Some examples of these research-based programs for high-risk youth include:

**CASASTART<sup>sm</sup>**. *CASASTART<sup>sm</sup>* (Striving Together to Achieve Rewarding Tomorrows) is a comprehensive neighborhood-based, schoolcentered program developed by CASA to prevent substance abuse and delinquency among high-risk eight- to 13-year old students and to reduce drug-related crime in their neighborhoods. CASASTART<sup>sm</sup> brings together under one roof schools, health and social service agencies and police, and provides participants with mentors for the common purpose of helping keep at-risk children and teens drug and violence free. The central management of the program may reside in the mayor's office, a church organization, a school or a particular community group. Case managers work with parents and

siblings of youth participants providing services as varied as after-school programs, transportation and family court advocacy. Potentially eligible children are referred to CASASTART<sup>sm</sup> case managers by school, social service staff, police or juvenile court personnel. The U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention also has designated CASASTART<sup>sm</sup> a Model Program, and CASASTART<sup>sm</sup> is the only program for high-risk children designated as an Exemplary Program by the U.S. Department of Education Expert Panel on Safe, Disciplined and Drug-Free Schools.<sup>4</sup> (See Appendix A for contact information)

**Strengthening Families Program (SFP).** The *Strengthening Families Program (SFP)* is a 14 session family skills training program designed for the high-risk, six- to 12-year old children of substance abusers. The parents attend a parenting class while the children attend a social skills training class in the first hour. In the second hour, the parents and children practice what they have learned together. The program has been found to improve parenting skills, children's social skills and family relationships. Positive outcomes include reduced parent and older youth alcohol and drug use.<sup>5</sup> (See Appendix A for contact information)

The program has been recognized by the Office of Juvenile Justice and Delinquency Prevention as an effective, research-based family program.<sup>6</sup> Recently, preschool, junior high and high school versions of the program have been developed. One review of alcohol prevention programs in schools found the junior high version to be the most effective program available in reducing alcohol initiation and use.<sup>7</sup>

Other programs targeted to high-risk youth that may not have been tested as rigorously also include families in the intervention protocol. Some examples of these include:

**SAMHSA's Children's Program Kit.** This is a flexible tool that can be used by anyone who works with the children of addicted parents. Designed for use in multiple settings, with children in elementary, middle and high school, the kit contains an instruction manual, curriculum

and support materials such as instructional videos. The kit is designed to increase children's resilience through problem-solving and coping techniques. Materials are available to help addicted parents understand what their children are experiencing. (See Appendix A for contact information)

# The Cambridge and Somerville Program for Alcoholism Rehabilitation (CASPAR).

CASPAR is an alcohol and drug education program for children of alcoholics.<sup>8</sup> Developed in Somerville, Massachusetts during the mid-1970s, the CASPAR program, in collaboration with community organizations and schools, offers prevention and intervention services for high-risk youth at all grade levels. Supported by state, city, school and court system funds, CASPAR provides assessment, education, outpatient counseling and support group services. Children are referred to the program by schools, police, the courts and parents. The CASPAR program has been shown to be effective in raising participants' awareness about alcohol and in changing their perceptions of alcoholism.<sup>9</sup> (See Appendix A for contact information)

#### The Children's Program at the Betty Ford

Center. This program is designed to help children of substance abusers between the ages of seven and 12 to learn about substance abuse and develop the resilience to maintain their own emotional health. The four-day program offers a variety of problem-solving, coping and self-care strategies that help children take better care of themselves and stay safe when they return home from the program. The Children's Program offers children the opportunity to talk openly and express their feelings regarding their experiences living with substance-abusing parents. Parents join the children during the last two days of the program and also participate in their own parent group. Family members share their thoughts and feelings with each other through structured activities. At the end of the four-day program, the children and their families often are referred to local continuing care programs.<sup>10</sup> (See Appendix A for contact information)

The Hazelden Center for Youth and Families' Parent Program. This is a four-day education program offered at the Hazelden Center for Youth and Families in Plymouth, Minnesota. The program can be used as a supplement to adolescent inpatient or outpatient care or can be attended by any concerned parent of a young substance user. The program's focus is on education and support and includes lectures, videos, small group discussions with other parents and a family conference with the substance-abusing child. The goals of the program are for parents to understand substance abuse and addiction and their impact on children and the family; learn about the effects of alcohol and drug use on children's development; develop new techniques for parenting a young person who is in recovery; gain support through interaction with other parents; and plan for continued self-care and recovery.<sup>11</sup> Hazelden also offers a more general program for family members of any chemically dependent person which provides an introduction to self-help and support groups as well as information about improving family functioning.<sup>12</sup> (See Appendix A for contact information)

**Phoenix House: Intervention Moves Parents and Children Together (IMPACT).** IMPACT is an after-school prevention program in New York City for teens who are substance-involved. The goal of the program is to involve parents in motivating teens to stop using drugs and to change the teen's home environment. Parents, teens and program staff meet once a week and parents learn how to support their child, learn new ways of communicating and network with other families of drug-using children. Family counseling and parent education seminars round out the program.<sup>13</sup> (See Appendix A for contact information)

#### Children of Parents in Recovery

One group of children that often is overlooked despite their high-risk status is children whose parents are in recovery from substance abuse. These children have received limited attention in the prevention field and few programs exist that address their needs. Yet, parents in recovery and their children face unique challenges. For example, as parents focus--sometimes exclusively-on their recovery, they may continue to neglect their parenting responsibilities. Children with one or both parents receiving treatment or attending self-help/mutual support groups may find themselves with no more time or attention from their parents than they had in the active stages of their addiction. Thus, children may feel as bad as or worse than they did when the parents were substance involved. Such feelings may include a sense of abandonment or psychological isolation. Furthermore, recovery does not necessarily yield a set of effective parenting skills that may have been missing when the parent was abusing substances. Parents in recovery need help in providing a secure and stable environment for their children to help ensure that children do not turn to tobacco, alcohol or drugs to deal with the complexities involved in parental recovery. One way recovering parents can help their children is by encouraging them to attend Al-Anon or Alateen, mutual support groups for family members or friends of substance abusers.

# Get Professional Help for Substance-Abusing Family Members

Few science-based, effective, affordable and accessible treatment programs exist for individuals with substance abuse problems. This is especially true of programs tailored to children and teens. All too frequently, physicians, schools, community leaders or clergy--sources to whom families might turn for help--are not adequately trained to deal with substance abuse problems.

Given the vast limitations in the availability of effective treatment programs, family members need to be equipped to find qualified help. The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) has provided some guidelines to consider when choosing a treatment program. (See Table 5.1)

# Table 5.1SAMHSA Guidelines for Points to<br/>Consider When Choosing a<br/>Treatment Program14

- Does the program accept your insurance? If not, will they work with you on a payment plan or find other means of support for you?
- Is the program run by state-accredited, licensed and/or trained professionals?
- Is the facility clean, organized and well run?
- Does the program encompass the full range of needs of the individual (medical: including infectious diseases; psychological: including co-occurring mental illness; social; vocational; legal; etc.)?
- Does the program also address sexual orientation and physical disabilities as well as provide age, gender and culturally appropriate treatment services?
- Is long-term aftercare support and/or guidance encouraged, provided and maintained?
- Is there ongoing assessment of an individual's treatment plan to ensure it meets changing needs?
- Does the program employ strategies to engage and keep individuals in longer-term treatment, increasing the likelihood of success?
- Does the program offer counseling (individual or group) and other behavioral therapies to enhance the individual's ability to function in the family/community?
- Does the program offer medication as part of the treatment regimen, if appropriate?
- Is there ongoing monitoring of possible relapse to help guide patients back to abstinence?
- Are services or referrals offered to family members to ensure they understand addiction and the recovery process to help them support the recovering individual?

# Help for Substance-Abusing Children

Although accessible, affordable and effective treatment options for substance-abusing youth are scarce, a number of programs and services have been developed to address specifically the treatment needs of young people.

**Treatment Programs.** One useful tool for searching for an appropriate treatment program for

a child is SAMHSA's *Substance Abuse Treatment Facility Locator*, an on-line system that allows for detailed searches by city and state to select treatment approaches, from outpatient to long-term residential treatment. Parents can indicate on the search form that they are seeking a program geared toward adolescents. They also can choose a program that specializes in children of substance abusers, co-occurring mental health problems or gay and lesbian populations. The database is searchable by type of payment accepted as well. (http://findtreatment. samhsa.gov/; 800-662-HELP.)

Another useful on-line tool, *Treating Teens: A Guide to Adolescent Drug Programs*, provides current, reliable information on 144 adolescent treatment programs across the country. It includes helpline and Web site information for all 50 states and the District of Columbia. The guide can be ordered from Drug Strategies, a nonprofit research institute that promotes effective substance abuse interventions. (http://www.drugstrategies.org/pubs.html#teen)

**Other Resources.** Individuals and organizations that deal with children on a regular basis, such as physicians, schools, juvenile justice workers, community organizations or clergy, may be equipped to screen teens for substance abuse and provide appropriate recommendations and referrals for interventions.<sup>15</sup> Self-help programs targeted to young people also are available for teens and frequently are used in conjunction with a treatment program.

• **Physicians.** Although the family physician or a child's pediatrician may be a trusted resource, it is important for families to recognize that most physicians are not well trained to screen for, identify, diagnose or treat substance abuse.<sup>16</sup> Despite this lack of training, physicians who are motivated to help a patient with a potential substance abuse problem are in a position to administer brief screening interviews commonly used to identify substance abuse in teens and to take into account the teen's medical history.

Brief screening instruments that have shown to be effective in identifying substance use problems in adolescents include the Alcohol Use Disorders Identification Test (AUDIT), the Problem Oriented Screening Instrument for Teenagers (POSIT) and the CRAFFT.<sup>17</sup> Physicians also can administer urine or blood screens to test for the presence of certain substances of abuse.

If a screening test indicates that the child might be abusing or dependent on substances, the physician--if trained to do so--may offer brief counseling to the child or may refer him or her to other resources, including another physician or psychiatrist more experienced with substance use disorders, a psychologist or social worker, a self-help group, a substance use counselor or--in more acute cases--a residential treatment center.<sup>18</sup>

One method of physician counseling that has been found to be effective for tobacco- and alcohol-related problems in patients as young as 15-years old is the brief intervention.<sup>19</sup> Brief interventions can be conducted in three or four short five- to 10-minute office visits.<sup>20</sup> A brief intervention consists of several steps, in which the physician:<sup>21</sup>

- Assesses the patient via brief screening tests such as those described above, indicates that the teen might have a problem, expresses concern and describes possible consequences of substance abuse;
- Sets with the patient an agreed-upon goal for reducing substance use;
- Discusses with the patient situations in which it might be hard to abstain from substances and suggests coping techniques;
- Supplies the patient with supplementary printed materials and resources on quitting or reducing the use of substances; and
- Sets up follow-up visits to encourage long-term abstinence.

- **Family Therapists**. Family-based therapy attempts to change behavior by changing the ways in which parents and children handle conflict, make decisions or even talk to each other. Family-based therapy draws on the innate strengths of the family and may incorporate resources like schools or churches in the attempt to reduce or overcome more challenging behaviors. They also have shown higher rates of engagement and retention in treatment among teens, even among those particularly hard to reach, and their parents; treatment completion is one of the most important factors in reducing substance use. Familybased therapies can improve family functioning and can enhance other intervention approaches.
- Schools. Some schools have qualified and trained school counselors and/or Student Assistance Programs (SAPs) for children who are involved with substances of abuse. Comprised of a core team of administrators, teachers, counselors and social workers, a typical SAP offers early identification of student problems, assessment of student needs, in-school counseling and support services, referral to outside agencies and follow-up services through problem-solving teams and case management. In addition, SAPs provide staff training and promote program awareness to the larger school community.<sup>22</sup> Children of substance abusers are identified as one of several high-risk groups eligible to receive SAP services.<sup>23</sup> A number of studies have found that fewer students report substance use after participating in SAPs.<sup>24</sup> (See Appendix A for contact information)
- **Mutual Support/Self-help Programs.** Like adults, teens who abuse substances may attend a number of different self-help groups, including *Alcoholics Anonymous* (*AA*), *Narcotics Anonymous* (*NA*) or *Cocaine Anonymous* (*CA*), each of which is based on the 12-step model of recovery. Many treatment programs encourage patients to participate in a self-help group during and after formal treatment. The Web sites associated with each of these self-help

groups provide contact information for finding a local group. Contact information also can be found in local telephone directories.

#### Help for Substance-Abusing Adults

Accessible, affordable and effective treatment options for substance-abusing adults are difficult to find, although more options exist for adults than for children.

**Treatment Programs.** SAMHSA's *Substance Abuse Treatment Facility Locator*, described above, can be useful in finding the right treatment program for a substance abuser with specific needs. (http://findtreatment.samhsa.gov/; 800-662-HELP)

Because of the unique treatment needs of many parents with children--including insufficient childcare, financial difficulties and children at risk for behavioral and emotional problems due to their parents' substance abuse--some programs have attempted to take children of substance abusers into account in providing treatment services. Some examples of such programs are:

Focus on Families was designed for families with drug-addicted parents of young children, particularly those enrolled in methadone treatment. The goals of the program are to reduce the risk of relapse, to teach skills for coping with relapse incidents and to decrease drug-use episodes. Other objectives of the program are to increase family management skills, anger management skills, problem solving skills and the ability to teach these skills to the children of the family. Outcome data suggest that parents in the program showed a 65 percent reduction in heroin use frequency and were six times less likely to use cocaine in the last month compared to control parents. The data were suggestive that the program might be beneficial to the children in the program as well.<sup>25</sup> Focus on Families is considered by SAMHSA to be a model program. (See Appendix A for contact information)

- **Comprehensive Substance Treatment and Rehabilitation (CSTAR)/The Missouri** System was established in 1991 by the Division of Alcohol and Drug Abuse at Missouri's Department of Mental Health in response to the growing number of infants born to drug-addicted mothers. Programs are organized and run by private, nonprofit community organizations that are certified in accordance with treatment standards promulgated by the Missouri Department of Mental Health.<sup>26</sup> Under the *CSTAR* women and children's model, mothers receive a comprehensive array of services that includes assessment, diagnosis, individual and group substance abuse counseling, group education, family therapy and community support work. In addition, mothers receive weekly training on parenting skills. Children are provided with on-site childcare and treatment for physical. emotional and behavioral conditions brought about by their mothers' addictions. Each program is required to design ageappropriate services for children that address issues of self-esteem, positive family relationships, decision-making skills, conflict resolution and understanding chemical dependency as a family illness.<sup>27</sup> Women and their children may receive residential support or supportive housing to assure a safe, drug-free environment while receiving treatment services.<sup>28</sup> (See Appendix A for contact information)
- **Operation Parental Awareness and Responsibility** (PAR) Village, located in Pinellas, Florida, utilizes a gender-specific treatment model that provides up to 18 months of residential treatment for women and their children. The program targets pregnant and post-partum substance-abusing women who wish to reunite with their children. The PAR Village Developmental Center is a licensed therapeutic preschool that serves children whose mothers are in residential substance abuse treatment at PAR Village. The goal of the center is to interrupt multi-generational chemical dependency and to decrease the developmental differences that exist

between the children of substance abusers and their peers. In 2001, the agency's Family Support Network (FSN) treatment model, a component used in family therapy, earned the Grand Prize for Treatment Programs in the First Annual Substance Abuse Services Best Practice Awards Program, sponsored by the Florida Alcohol and Drug Abuse Association (FADAA) and the Department of Children and Families (DCF) Substance Abuse Program Office.<sup>29</sup> (See Appendix A for contact information)

**Other Resources.** In addition to specific treatment programs, adult substance abusers may receive help from physicians, the workplace or various community resources. Self-help groups are important resources for adults struggling with a substance abuse problem.

- **Physicians.** As is true when finding help for substance-abusing children, looking to one's doctor for help in addressing an adult family member's substance abuse is a good first step, albeit one that has to be approached with the recognition that most physicians are not comfortable with or well trained to address substance abuse issues in their patients.<sup>30</sup> However, if one's family physician is knowledgeable about substance abuse and interested in helping, he or she can serve as a first line of intervention by assessing the nature and extent of the substance abuse problem and providing appropriate referrals for further care and follow-up.
- Assistance Through the Workplace. The primary source of potential help within the workplace for a substance abuser is through an Employee Assistance Program (EAP). EAPs are designed to help identify and resolve problems adversely affecting employee well-being or job performance, including substance abuse and other psychiatric problems, family, financial and legal problems and other personal concerns.
- **Mutual Support/Self-help Programs.** One of the most common resources for adults seeking help with a substance abuse problem is the mutual support or self-help group, based

on the 12-step model of recovery. Substance abusers may participate in these groups alone or as part of a larger treatment regimen. The most well known of these groups are Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) although other similar groups exist for individuals with cocaine, marijuana, prescription or other drug problems. There often are subsets of these groups that are tailored to the needs of particular sub-groups, like women only, men only, gays and lesbians, etc. Participants are ensured anonymity and there are no costs associated with membership. The Web sites associated with each of these self-help groups provide contact information for finding a local group. Contact information also can be found in local telephone directories.

## How Family Members Can Help a Substance Abuser Enter Treatment

When confronted by family members' suspicions, many substance abusers will deny using alcohol or drugs and be reluctant to discuss the topic. Family members can play an important role in motivating resistant substance abusers to obtain treatment and their involvement in treatment can contribute to improved outcomes for the substance abuser.<sup>31</sup> Traditional interventions are to provide information about substance abuse and supportive counseling, to engage in sympathetic listening and to make referrals to treatment programs and mutual support or self-help groups. More aggressive, yet still supportive approaches involve active intervention by family members. Some examples include:

#### The Johnson Intervention<sup>\*</sup>

This approach prepares family members and friends of substance abusers for a meeting in which they confront the abuser with the adverse effects of his or her drinking or drug use and urge the family member in a loving and firm way to get help. The intervention is a specialized therapeutic technique that provides formal training to the substance abuser's social network prior to the intervention. The technique also helps family members of the abuser to begin the process of recovering from the effects of the addiction on themselves and the family. Unlike coercive referrals, which may be indifferent or hostile toward the substance abuser, the emphasis of the *Johnson Intervention* is on the tone of care and concern.

A comparison of the *Johnson Intervention* to methods of referral to outpatient treatment involving coercive techniques such as ultimatums or less comprehensive efforts such as suggestions from a clergyperson found that those who had undergone the *Johnson Intervention* were more likely to enter treatment.<sup>32</sup>

#### Community Reinforcement and Family Training (CRAFT)

*Community Reinforcement and Family Training (CRAFT)* teaches family members or any concerned significant other in the life of the substance abuser how to encourage initially unmotivated problem drinkers to seek treatment.<sup>33</sup> The *CRAFT* approach teaches families and friends to refrain from reinforcing addictive behaviors, reduce sources of stress and to support alternative and healthier behaviors. In addition, family members learn how to give positive attention to the addict when he or she is sober. *CRAFT* has been found to reduce anxiety and depression among family members and friends of substance abusers as well.<sup>34</sup>

# Support for the Non-Abusing Family Members

Certain mutual support or self-help groups based on the 12-Step Alcoholics Anonymous model offer support to individuals struggling with a family member's substance abuse. Contact information for these groups can be found on their Web sites and in local directories.

<sup>\*</sup> This intervention was advocated by Vernon Johnson of the Johnson Institute in Minneapolis, Minnesota.

#### Al-Anon

The Al-Anon program of recovery is adapted from Alcoholics Anonymous (AA) and is based on the 12-Steps and the 12 Traditions of AA. Al-Anon is open to families and friends of alcoholics. It also is available to relatives of alcoholics who are addicted to drugs, although the focus of the meeting is on recovery from the impact of another person's drinking. The objective of Al-Anon is to help families and friends of alcoholics recover from the effects of living with a problem drinker by helping them to better understand the alcoholic. Al-Anon also provides support and help for adults who grew up in alcoholic families. Self-report data reveal that more than 95 percent of Al-Anon members believe that the program has improved their mental health and well-being as well as their daily functioning at home, school or work.<sup>35</sup> The Al-Anon approach to having family members help their alcohol-abusing loved ones involves an acceptance of their own inability to control the alcoholic. Family members receive group support.<sup>36</sup> There are approximately 13,000 Al-Anon groups in the United States.<sup>37</sup>

#### Alateen

Based on the AA/Al-Anon mutual support or selfhelp model, Alateen is a fellowship and support network for young people ages 12 through 20 whose lives have been affected by alcoholism. Alateen is open to young people concerned about an alcoholic who is also abusing drugs, but the focus of meetings is on coping with a relative or friend's alcohol abuse. Every Alateen group has an adult member of Al-Anon who serves as sponsor. The sponsor is an active part of the group, guiding and sharing knowledge of Al-Anon's 12-Step program. During the group meetings, Alateen members share their concerns and fears and learn from one another. More importantly, Alateen provides its members the opportunity to accept that they did not cause the alcoholic to abuse alcohol and that they cannot themselves cure the problem.<sup>38</sup> Alateen does not offer counseling or treatment. There are approximately 1,200 Alateen groups in the United States.<sup>39</sup> (See Appendix A for contact information)

#### Adult Children of Alcoholics (ACA)

ACA is a 12-Step, self-help recovery program for a dult children of alcoholics, similar to Al-Anon and Alateen.<sup>40</sup>

#### **Families Anonymous**

Families Anonymous is a support group for relatives or friends of those with alcohol, drug or behavioral problems. The organization has 500 groups in more than 20 countries (200 in the United States). Members attend regular meetings where they share experiences and concerns and receive mutual support. Members are encouraged to work through the 12-Steps to come to terms with problems in their lives that are associated with having a loved one addicted to substances of abuse.<sup>41</sup> (See Appendix A for contact information)

#### **Other Resources**

Several national organizations specifically address the information and support needs of children of substance abusers. These organizations provide resources for those seeking to better understand the problem of substance abuse in the family and obtain the support and help they need to cope with their situation and reduce their own increased risks for substance abuse. Some notable examples include:

The National Association for Children of • Alcoholics (NACoA) is a national non-profit membership and affiliate organization working on behalf of children of alcohol--and drug--dependent parents and their families. The organization works to raise public awareness, influence public policy on the local, state and national levels, advocate for effective education and prevention services and advance professional knowledge and understanding.<sup>42</sup> NACoA develops products for teachers, parents, health care providers. clergy and other professionals to understand and intervene effectively with children of substance abusers. Information about this organization can be accessed from their Web site. (http://www.nacoa.org)

The Children of Alcoholics Foundation • (COAF) is a national non-profit organization affiliated with Phoenix House that provides educational materials, research reports and other information about parental substance abuse for the general public and for professionals. COAF provides training programs, educational materials and information to community-based professionals, agencies and institutions to help build support networks at the local level. COAF also offers HelpLink (1-800-359-COAF), a 24-hour service that provides information and referrals to children of substance abusers, concerned friends and family and professionals. Those who call or write get personalized responses and referrals to nearby support programs, as well as printed booklets and other materials.<sup>43</sup> Information about this organization can be accessed from their Web site. (http://www.coaf.org/)

# Appendix A Contact Information

#### Adult Children of Alcoholics (ACA WSO)

PO Box 3216 Torrance, CA 90510 Phone: 310/534-1815 Web site: www.adultchildren.org E-mail Contact: meetinginfo@adultchildren.org; info@adultchildren.org

#### Al-Anon Family Group Headquarters, Inc.

1600 Corporate Landing Parkway Virginia Beach, VA 23454 Phone: 888/4AL-Anon Web site: www.al-anon.alateen.org E-mail Contact: wso@al-anon.org

#### Cambridge and Somerville Program for Alcoholism Rehabilitation

(CASPAR) Youth Services 162 Highland Avenue Somerville, MA 02143 Phone: 617/623-2080 Fax: 617/623-7665

#### CASA's Striving Together to Achieve Rewarding Tomorrows (CASASTART<sup>sm</sup>)

The National Center on Addiction and Substance Abuse (CASA) at Columbia University 633 Third Avenue, 19<sup>th</sup> Floor New York, NY 10017 Phone: 212/841-5200 Fax: 212/956-8020 Web site: www.casacolumbia.org E-mail Contact: Imurray@casacolumbia.org

#### Children's Program at the Betty Ford Center

California Children's Program Admissions 39000 Bob Hope Drive Rancho Mirage, CA 92270 Phone: 760/773-4291; 800/854-9211 x4191 Web site: www.bettyfordcenter.org E-mail Contact: bfckids@bettyfordcenter.org

#### **Families Anonymous**

PO Box 3475 Culver City, CA 90231-3475 Phone: 800/736-9805 Fax: 310/815-9682 Web site: www.familiesanonymous.org E-mail Contact: famanon@FamiliesAnonymous.org

#### Hazelden Center for Youth and Families

11505 36<sup>th</sup> Avenue North Plymouth, MN 55441 Phone: 800/257-7810 Fax: 763/559-0149 Web site: www.hazelden.org E-mail Contact: info@hazelden.org

#### **Missouri Department of Mental Health**

PO Box 687 Jefferson City, MO 65101 Phone: 573/751-4942; 800/364-9687 Web site: www.dmh.missouri.gov/ada/progs/treatment.htm Web site: www.dmh.missouri.gov/ada/help/provdir.pdf E-mail Contact: adamail@dmh.mo.gov

#### National Student Assistance Association

4200 Wisconsin Avenue, NW Suite 106-118 Washington, DC 20016 Phone: 800/857-6310 Fax: 215/257-6997 Web site: www.nasap.org E-mail Contact: info@nasap.org

#### **Phoenix House IMPACT**

164 West 74<sup>th</sup> Street New York, NY 10023 Phone: 646/505-2000 x7780 Web site: www.phoenixhouse.org

#### **Social Development Research Group**

9725 Third Avenue, NE Suite 401 Seattle, WA 98115 Phone: 206/685-1997 Fax: 206/543-4507 Web site: http://depts.washington.edu/sdrg/FOF.htm E-mail Contact: sdrg@u.washington.edu

#### **Operation Parental Awareness and Responsibility (PAR)**

Phone: 888/PAR-NEXT Web site: www.operationpar.org

#### **Strengthening Families Program**

Department of Health Promotion and Education University of Utah 1901 E. South Campus Drive, Room 2142 Phone: 801/581-8498 Fax: 801/581-5872 Web site: www.strengtheningfamiliesprogram.org E-mail Contact: karol.kumpfer@health.utah.edu

## SAMHSA's Children's Program Kit

Available free through the National Clearinghouse for Alcohol and Drug Information Phone: 800/729-6686 Web site: http://ncadi.samhsa.gov/promos/coa/

#### **Chapter I** Notes

<sup>1</sup> McCubbin, McCubbin, Thompson, & Han. (1999); Austin & Prendergast. (1991)

<sup>2</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2005); Grant. (2000)

- <sup>3</sup> Kumpfer & DeMarsh. (1986)
- <sup>4</sup> Kumpfer et al. (1986)
- <sup>5</sup> Kumpfer et al. (1986); Sher. (1991); Substance Abuse and Mental Health Services Administration, Office of
- Applied Studies. (2004b)
- <sup>6</sup> Chase, Deming, & Wells. (1998); Stein, Riedel, & Roteram-Borus. (1999)
- Velleman & Orford. (1990)
- <sup>7</sup> Children's Defense Fund. (2000)
- <sup>8</sup> Kelleher, Chaffin, Hollenberg, & Fischer. (1994)
- <sup>9</sup> Deren. (1986)
- <sup>10</sup> Conners et al. (2004)
- <sup>11</sup> Conners et al. (2004)
- <sup>12</sup> Kumpfer, Alvarado, & Whiteside. (2003)
- <sup>13</sup> McCubbin et al. (1999); McLanahan & Casper. (1995); Smith. (1999)
- <sup>14</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004c)
- <sup>15</sup> McLanahan et al. (1995)
- <sup>16</sup> Smith. (1999)
- <sup>17</sup> Smith. (1999)
- <sup>18</sup> Neher & Short. (1998)
- <sup>19</sup> Munson & Sutton. (2004)
- <sup>20</sup> McLanahan et al. (1995)
- <sup>21</sup> U.S. Census Bureau, National Center for Health Statistics. (2004)
- <sup>22</sup> Deleire & Kalil. (2002)
- <sup>23</sup> U.S.Census Bureau. (2003b)
- <sup>24</sup> Smith. (1999)
- <sup>25</sup> Federal Interagency Forum on Child and Family Statistics. (2004)
- <sup>26</sup> U.S.Census Bureau. (2003d)
- <sup>27</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004a); Griffin,
- Botvin, Scheier, Doyle, & Williams. (2003)
- <sup>28</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004a); Luthar & D'Avanzo. (1999)
- <sup>29</sup> U.S.Census Bureau. (2003c)
- <sup>30</sup> Children's Defense Fund. (2004)
- <sup>31</sup> Children's Defense Fund. (2000)
- <sup>32</sup> Sawhill & Chadwick. (1999)
- <sup>33</sup> Jones. (2001)
- <sup>34</sup> Deleire et al. (2002)
- <sup>35</sup> Deleire et al. (2002)
- <sup>36</sup> U.S.Census Bureau. (2003e)
- <sup>37</sup> U.S.Census Bureau. (2003e)
- <sup>38</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)
- <sup>39</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a); Califano. (2000)
- <sup>40</sup> Dubowitz, Black, Kerr, Starr, & Harrington. (2000)
- <sup>41</sup> Dubowitz et al. (2000)
- <sup>42</sup> Barrera, Chassin, & Li. (1995); Ellis, Zucker, & Fitzgerald. (1997); Johnstone. (1994)
   <sup>43</sup> Federal Interagency Forum on Child and Family Statistics. (2004)
- <sup>44</sup> U.S.Census Bureau. (2003a)
- <sup>45</sup> Casper & Bryson. (1998)
- <sup>46</sup> Wallace. (1999)
- <sup>47</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)

- <sup>48</sup> Ellickson, Orlando, Tucker, & Klein. (2004)
  <sup>49</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001c)
  <sup>50</sup> Wallace. (1999)

#### Chapter II Notes

<sup>1</sup> Fauci, A. S. et al. (1999); McEwen, B. S., 1998; Glaser, R. et al. (1999); Levenstein, S., Ackerman, S., Kiecolt-Glaser, J. K., & Dubois, A. (1999); Quick, J. D., Horn, R. S., & Quick, J. C. (1986); Roberts, K. S. & Brent, E. E. (1982)

<sup>2</sup> Jacobson, S. W. (1999); Johnson, J. L., Leff, M., Adger, Hoover, Macdonald, Donald Ian, & Wenger, Sis. (1999);
 Streissguth, A. P., Barr, H. M., Bookstein, F. L., Sampson, P. D., & Olson, H. C. (1999)

- <sup>3</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)
- <sup>4</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)
- <sup>5</sup> Becker, A. B. et al. (1999); National Cancer Institute. (1999); Ness, R. B. et al. (1999); Young, N. K. (1997)
- <sup>6</sup> American Lung Association. (2003)
- <sup>7</sup> Martin, Joyce A. et al. (2003)
- <sup>8</sup> Martinez, F. D., Wright, A. L., Taussig, L. M., & Group Health Medical Associates. (1994); National Cancer Institute. (1999)
- <sup>9</sup> Young, N. K. (1997)

<sup>10</sup> Becker, A. B. et al. (1999); Shen, R. Y., Hannigan, J. H., & Kapatos, G. (1999); Thapar, Anita et al. (2003); Weitzman, M., Gortmaker, S., & Sobol, A. (1992)

- <sup>11</sup> Weissman, M. M., Warner, V., Wickramaratne, P. J., & Kandel, D. B. (1999)
- <sup>12</sup> Richter, Linda & Richter, Daniel M. (2001)

<sup>13</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)

- <sup>14</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)
- <sup>15</sup> Larkby, C. & Day, N. (1999)
- <sup>16</sup> Richter, Linda & Richter, Daniel M. (2001)
- <sup>17</sup> May, P. A. et al. (2004)
- <sup>18</sup> Young, N. K. (1997)
- <sup>19</sup> Austin, G. & Prendergast, M. (1991)
- <sup>20</sup> Johnson, J. L., Leff, M., Adger, Hoover, Macdonald, Donald Ian, & Wenger, Sis. (1999); Weinberg, N. Z. (1997); Young, N. K. (1997)
- <sup>21</sup> Young, N. K. (1997)
- <sup>22</sup> Ikonomidou, C. et al. (2000)
- <sup>23</sup> Austin, G. & Prendergast, M. (1991); Mattson, S. N., Goodman, A. M., Delis, D. C., & Riley, E. P. (1999);
- Streissguth, A. P., Barr, H. M., & Sampson, P. D. (1990); Streissguth, A. P., Barr, H. M., Bookstein, F. L., Sampson, P. D., & Olson, H. C. (1999)
- <sup>24</sup> Abel, E. L. & Sokol, R. J. (1986); Weinberg, N. Z. (1997)
- <sup>25</sup> Abel, E. L. & Sokol, R. J. (1987)
- <sup>26</sup> Lupton, Chuck, Burd, Larry, & Harwood, Rick. (2004); May, Philip A. & Gossage, J. Phillip. (2001)
- <sup>27</sup> Larkby, C. & Day, N. (1999)
- <sup>28</sup> Famy, C., Streissguth, A. P., & Unis, A. S. (1998)
- <sup>29</sup> Streissguth, A. P., Barr, H. M., & Sampson, P. D. (1990); Young, N. K. (1997)
- <sup>30</sup> Jacobson, S. W. (1999); Streissguth, A. P., Barr, H. M., Bookstein, F. L., Sampson, P. D., & Olson, H. C. (1999); Young, N. K. (1997)
- <sup>31</sup> Day, N. L. & Richardson, G. A. (2004); Korkman, M., Kettunen, S., & Autti-Rämö, I. (2003); May, P. A. et al. (2004)
- <sup>32</sup> Korkman, M., Kettunen, S., & Autti-Rämö, I. (2003)
- <sup>33</sup> Austin, G. & Prendergast, M. (1991); Larkby, C. & Day, N. (1999); Young, N. K. (1997)
- <sup>34</sup> Richter, Linda & Richter, Daniel M. (2001)
- <sup>35</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)
- <sup>36</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)
- <sup>37</sup> Ebrahim, S. H. & Gfroerer, J. (2003)
- <sup>38</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)
- <sup>39</sup> Eyler, F. D. & Behnke, M. (1999); Lester, B. M., LaGasse, L. L., & Bigsby, R. (1998); Richter, Linda & Richter, Daniel M. (2001); Tronick, E. Z. & Beeghly, M. (1999)
- <sup>40</sup> Austin, G. & Prendergast, M. (1991)
- <sup>41</sup> Young, N. K. (1997)

- <sup>42</sup> Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994)
- <sup>43</sup> Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994)
- <sup>44</sup> Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994); Young, N. K. (1997)
- <sup>45</sup> Deren, S. (1986)
- <sup>46</sup> Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994); Butz, A. M. et al. (1999); Johnson, J. L., Leff, M.,
- Adger, Hoover, Macdonald, Donald Ian, & Wenger, Sis. (1999); Ness, R. B. et al. (1999); Young, N. K. (1997)
- <sup>47</sup> Held, J. R., Riggs, M. L., & Dorman, C. (1999); Swanson, M. W., Streissguth, A. P., Sampson, P. D., & Olson, H. C. (1999); Young, N. K. (1997)
- <sup>48</sup> Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994)
- <sup>49</sup> Wachsman, L., Schuetz, S., Chan, L. S., & Wingert, W. A. (1989)
- <sup>50</sup> Kropenske, V. & Howard, J. (1994)
- <sup>51</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004b)
- <sup>52</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004b)
- <sup>53</sup> Soliman, Soheil, Pollack, Harold A., & Warner, Kenneth E. (2004)
- <sup>54</sup> Pirkle, J. L. et al. (1996)
- <sup>55</sup> Davis, R. M. (1998)
- <sup>56</sup> DiFranza, J. R. & Lew, R. A. (1996)
- <sup>57</sup> California Environmental Protection Agency. (1997); Davis, R. M. (1998); Sasco, A. J. & Vainio, H. (1999)
- <sup>58</sup> Becker, A. B. et al. (1999); California Environmental Protection Agency. (1997); Davis, R. M., 1998; DiFranza, J. R. & Lew, R. A. (1996); Gergen, P. J., Fowler, J. A., Maurer, K. R., Davis, W. W., & Overpeck, M. D. (1998);
- National Cancer Institute (1999)
- <sup>59</sup> Becker, A. B. et al. (1999); Mascola, M. A., Van Vunakis, H., Tager, I. B., Speizer, F. E., & Hanrahan, J. P. (1998)
- <sup>60</sup> Hill, Sarah E., Blakely, Tony A., Kawachi, Ichiro, & Woodward, Alistair. (2004)
- <sup>61</sup> California Environmental Protection Agency (1997)
- <sup>62</sup> Hackshaw, A. K. (1998)
- <sup>63</sup> Lash, T. L. & Aschengrau, A. (1999); Morabia, A., Bernstein, M., Heritier, S., & Khatchatrian, N. (1998)
- <sup>64</sup> Li, G., Smith, G. S., & Baker, S. P. (1994)
- <sup>65</sup> National Highway Traffic Safety Administration. (2002)
- <sup>66</sup> National Highway Traffic Safety Administration. (2002)
- <sup>67</sup> Centers for Disease Control and Prevention. (2004)
- <sup>68</sup> Terhune, K. W. (1992)
- <sup>69</sup> Clark, D. B. et al. (1997); McConaughy, S. H. & Achenbach, T. M. (1994)
- <sup>70</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)
- <sup>71</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)
- <sup>72</sup> Chassin, L., Rogosch, F., & Barrera, M. (1991); Roosa, M. W., Dumka, L., & Tein, J. Y. (1996); West. M. O. & Prinz, R. J. (1987)
- <sup>73</sup> Helzer, J. E. & Pryzbeck, T. R. (1988); Hussong, A. M., Curran, P., & Chassin, L. (1998); Kessler, R. C. et al.
- (1997); Regier, D. A. et al. (1990)
- Schuckit, Marc A. (1987); Finn, P. R. & Justus, A. (1997)
- <sup>75</sup> Schuckit, Marc A. (1987); Finn, P. R. & Justus, A. (1997)
- <sup>76</sup> Sher, K. J., Walitzer, K. S., Wood, P. K., & Brent, E. E. (1991)
- <sup>77</sup> Sher, K. J., Walitzer, K. S., Wood, P. K., & Brent, E. E. (1991)
- <sup>78</sup> Hill, S. Y., Lowers, L., Locke, J., Snidman, N., & Kagan, J. (1999)
- <sup>79</sup> Richter, Linda & Richter, Daniel M. (2001)
- <sup>80</sup> Earls, F., Reich, W., Jung, K. G., & Cloninger, C. R. (1988)
- <sup>81</sup> Bauman, P. S. & Dougherty, F. E. (1983); Hogan, D. M. (1998); Nurco, D. N., Blatchley, R. J., Hanlon, T. E., &
- O'Grady, K. E. (1999); Stanger, C. et al. (1999); Wilson, G. S., McCreary, R., Kean, J., & Baxter, J. C. (1979)
- <sup>82</sup> Kandel, D. B. (1990)
- <sup>83</sup> Kumpfer, K. L. & DeMarsh, J. (1986)
- <sup>84</sup> Butterfield, Fox. (2004); Guevara, Rogelio E. (2003)
- <sup>85</sup> Butterfield, Fox. (2004)
- <sup>86</sup> Butterfield, Fox. (2004)
- <sup>87</sup> Drug Enforcement Administration. (2003)

<sup>88</sup> Anderson, A. R. & Henry, C. S. (1994); Chassin, L., Presson, C. C., Rose, J. S., & Sherman, S. J. (1998); Colder,

C. R., Chassin, L., Curran, P. J., & Stice, E. M. (1997); Duncan, T. E., Hops, H., Tildesley, E., & Duncan, S. C.

(1995); Pandina, R. J. & Johnson, V. (1989); Thompson, K. M. & Wilsnack, R. W. (1987); Weinberg, N. Z.,

Dielman, T. E., Mandell, W., & Shope, J. T. (1994); Yarnold, B. M. (1999)

- <sup>89</sup> Bierut, L. J. et al. (1998); Johnson, J. L., Leff, M., Adger, Hoover, Macdonald, Donald Ian, & Wenger, Sis. (1999); McGue, M. (1997); Merikangas, K. R. et al. (1998)
- <sup>90</sup> Belcher, H. M. & Shinitzky, H. E. (1998)
- <sup>91</sup> Merikangas, K. R. et al. (1998)
- <sup>92</sup> Meller, W. H., Rinehart, R., Cadoret, R. J., & Troughton, E. (1988); The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)
- <sup>93</sup> Austin, G. & Prendergast, M. (1991)
- <sup>94</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004b)
- <sup>95</sup> Grant, B. F. (2000)
- <sup>96</sup> Chassin, L., Rogosch, F., & Barrera, M. (1991); Ellis, D. A., Zucker, R. A., & Fitzgerald, H. E. (1997)
- <sup>97</sup> Chassin, L., Pitts, S. C., DeLucia, C., & Todd, M. (1999); Jacob, T., Windle, M., Seilhamer, R. A., & Bost, J.
- (1999); Weinberg, N. Z. (1997)
- <sup>98</sup> Chassin, L., Pitts, S. C., DeLucia, C., & Todd, M. (1999)
- <sup>99</sup> Ellis, D. A., Zucker, R. A., & Fitzgerald, H. E. (1997)

<sup>100</sup> Schuckit, Marc A. (1987); Finn, P. R. & Justus, A. (1997); Johnson, J. L., Leff, M., Adger, Hoover, Macdonald, Donald Ian, & Wenger, Sis. (1999)

<sup>101</sup> Schuckit, Marc A. (1994); Finn, P. R. & Justus, A. (1997)

#### **Chapter III** Notes

<sup>1</sup> Hogan, D. M., 1998; Williams, T. G. (1996)

<sup>2</sup> Austin, G. & Prendergast, M. (1991); Barnard, M. (1999); Ellis, D. A., Zucker, R. A., & Fitzgerald, H. E.

(1997); Johnson, Patrick. (2001); Kumpfer, K. L. & DeMarsh, J. (1986); Malpique, C. et al. (1998); West,

M. O. & Prinz, R. J. (1987); Williams, T. G. (1996); Young, N. K. (1997)

<sup>3</sup> Alleyne, B. C., Stuart, P., & Copes, R. (1991); Kandel, D. B. & Davies, M. (1990); Newcomb, M. D. (1995)

<sup>4</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2002)

<sup>5</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)

<sup>6</sup> Campaign for Tobacco-Free Kids. (2004)

<sup>7</sup> U.S. Department of the Treasury, Office of Economic Policy. (1998)

<sup>8</sup> Pronk, N. P., Goodman, M. J., O'Connor, P. J., & Martinson, B. C. (1999)

<sup>9</sup> Pronk, N. P., Goodman, M. J., O'Connor, P. J., & Martinson, B. C. (1999)

- <sup>10</sup> Lightwood, J. M., Phibbs, C. S., & Glantz, S. A. (1999)
- <sup>11</sup> Aligne, C. A. & Stoddard, J. J. (1997)
- <sup>12</sup> Children of Alcoholics Foundation. (1990)
- <sup>13</sup> Clark, R. E. (1994)
- <sup>14</sup> Clark, R. E. (1994)
- <sup>15</sup> Clark, R. E. (1994)
- <sup>16</sup> Clark, R. E. (1994)
- <sup>17</sup> Clark, R. E. (1994)
- <sup>18</sup> Caces, M. F., Harford, T. C., Williams, G. D., & Hanna, E. Z. (1999)
- <sup>19</sup> Waldron, Ingrid & Lye, Diane. (1989)
- <sup>20</sup> Vaz-Serra, Adriano, Canavarro, Maria Cristina, & Ramalheira, Carlos. (1998)
- <sup>21</sup> O'Farrell, T. J., Choquette, K. A., & Birchler, G. R. (1991); O'Farrell, T. J., Choquette, K. A., Cutter, H.
- S. G., & Birchler, G. R. (1997)
- <sup>22</sup> Leonard, K. E. & Eiden, R. D. (1999); McLeod, J. D. (1993)
- <sup>23</sup> Parker, D. A. & Harford, T. C. (1988); Watt, Toni Terling. (2002)
- <sup>24</sup> Dawson, D. A., Grant, B. F., & Harford, T. C. (1992)
- <sup>25</sup> Watt, Toni Terling. (2002); Parker, D. A. & Harford, T. C. (1988)
- <sup>26</sup> Waldron, Ingrid & Lye, Diane. (1989)
- <sup>27</sup> Power, C., Rodgers, B., & Hope, S. (1999)

<sup>28</sup> Hoffmann, J. P. (1993); Hoffmann, J. P. (1994); Hoffmann, J. P. (1995); Hoffmann, J. P. & Johnson, R.

A. (1998); Neher, L. S. & Short, J. L. (1998); Short, J. L. (1998); Yarnold, B. M. (1999); Kung, Eva M. & Farrell, Albert D. (2000)

<sup>29</sup> Neher, L. S. & Short, J. L. (1998)

<sup>30</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)

- <sup>31</sup> Neher, L. S. & Short, J. L., 1998; Short, J. L. (1998)
- <sup>32</sup> Hoffmann, J. P. (1993); Hoffmann, J. P. (1994); Hoffmann, J. P. (1995)
- <sup>33</sup> Kung, Eva M. & Farrell, Albert D. (2000)
- <sup>34</sup> Hoffmann, J. P. & Johnson, R. A. (1998); Neher, L. S. & Short, J. L. (1998)
- <sup>35</sup> Sokol-Katz, J., Dunham, R., & Zimmerman, R. (1997)

<sup>36</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002b)

- <sup>37</sup> Williams, T. G. (1996)
- <sup>38</sup> Richter, Linda, Chatterji, Pinka, & Pierce, James. (2000)
- <sup>39</sup> Williams, T. G. (1996)
- <sup>40</sup> Richter, Linda, Chatterji, Pinka, & Pierce, James. (2000)
- <sup>41</sup> Velleman, R. & Orford, J. (1990)
- <sup>42</sup> Chase, N. D., Deming, M. P., & Wells, M. C. (1998); Stein, J. A., Riedel, M., & Roteram-Borus, M. J. (1999) <sup>43</sup> Stein, J. A., Riedel, M., & Roteram-Borus, M. J. (1999)
- <sup>44</sup> Sher, K. J., Walitzer, K. S., Wood, P. K., & Brent, E. E. (1991)

<sup>45</sup> Crawford, Anne M., Pentz, Mary Ann, Chou, Chih-Ping, Li, Chaoyang, & Dwyer, James H. (2003); The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002b)

<sup>46</sup> Austin, G. & Prendergast, M. (1991); Hogan, D. M. (1998)

- <sup>47</sup> Carvalho, V., Pinsky, I., De Souza, E., Silva, R., & Carlini-Cotrim, B. (1995); Johnson, Patrick. (2001)
- <sup>48</sup> Richter, Linda, Chatterji, Pinka, & Pierce, James. (2000)

<sup>49</sup> Cunardi, C. B., Caetano, R., Clark, C. L., & Schafer, J. (1999); Grisso, J. A. et al. (1999); Kyriacou. D. N. et al. (1999)

- <sup>50</sup> Fals-Stewart, William. (2003)
- <sup>51</sup> Fals-Stewart, William, Golden, James, & Schumacher, Julie A. (2003)
- <sup>52</sup> Testa, Maria, Ouigley, Brian M., & Leonard, Kenneth E. (2003)
- <sup>53</sup> Kantor, G. K. & Straus, M. A. (1989)
- 54 Kantor, G. K. & Straus, M. A. (1989)
- <sup>55</sup> Kantor, G. K. & Straus, M. A. (1989)
- <sup>56</sup> Testa, Maria, Livingston, Jennifer A., & Leonard, Kenneth E. (2003)
- <sup>57</sup> Rivara, Frederick P. et al. (1997)
- <sup>58</sup> Bailey, J. E. et al. (1997)
- <sup>59</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)
- <sup>60</sup> Testa, Maria, Livingston, Jennifer A., & Leonard, Kenneth E. (2003)
- <sup>61</sup> Salomon, Amy, Bassuk, Shari S., & Huntington, Nicholas. (2002)
- <sup>62</sup> Malpique, C. et al. (1998)
- <sup>63</sup> Malpique, C. et al. (1998)
- <sup>64</sup> Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994); Chaffin, M., Kelleher, K., & Hollenberg, J. (1996)
- <sup>65</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999b)
- <sup>66</sup> Kelleher, R. C., Chaffin, M., Hollenberg, J., & Fischer, E. (1994)
- <sup>67</sup> Kelleher, R. C., Chaffin, M., Hollenberg, J., & Fischer, E. (1994)
- 68 Young, N. K. (1997)
- <sup>69</sup> Young, N. K. (1997)
- <sup>70</sup> Miller, B. A., Smyth, N. J., & Mudar, P. J. (1999)

<sup>71</sup> Bennett, E. M. & Kempter, K. J. (1994); Galaif, Elisha R., Stein, Judith A., Newcomb, Michael D., & Bernstein, David P. (2001); Jarvis, Tracey J., Copeland, Jan, & Walton, Layton. (1998); Kilpatrick, D. G. et al. (2000); Rounds-Bryant, Jennifer L., Kristiansen, Patricia L., Fairbank, John A., & Hubbard, Robert L. (1998); Simantov, E., Schoen, C., & Klein, J. D. (2000); The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1997b); Wilsnack, S. C., Vogeltanz, N. D., Klassen, Albert D., & Harris, T. Robert. (1997); Wilsnack, R. W., Wilsnack, S. C., Kristjanson, A. F., & Harris, T. B. (1998)

<sup>72</sup> Moran, Patricia B., Vuchinich, Sam, & Hall, Nancy K. (2004)

<sup>73</sup> Garnefski, Nadia & Arends, Ellen. (1998)

<sup>74</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)

<sup>75</sup> Felitti, Vincent J. et al. (1998)

<sup>76</sup> Austin, G. & Prendergast, M. (1991); Hegedus, A. M., Alterman, A. I., & Tarter, R. E. (1984); Sher, K.

- J., Walitzer, K. S., Wood, P. K., & Brent, E. E. (1991)
- <sup>77</sup> Johnson, J. L., Leff, M., Adger, Hoover, Macdonald, Donald Ian, & Wenger, Sis. (1999)
- <sup>78</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)

<sup>79</sup> Hegedus, A. M., Alterman, A. I., & Tarter, R. E. (1984); Knop, J., Teasdale, T. W., Schulsinger, F., & Goodwin, D. W. (1985)

<sup>80</sup> Sher, K. J., Walitzer, K. S., Wood, P. K., & Brent, E. E. (1991)

<sup>81</sup> Patterson, G. R. (1986)

- <sup>82</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001a)
- <sup>83</sup> Keller, Thomas E., Catalano, Richard F., Haggerty, Kevin P., & Fleming, Charles B. (2002)
- <sup>84</sup> Eiden, R. D., Peterson, M., & Coleman, T. (1999)
- <sup>85</sup> Keller, Thomas E., Catalano, Richard F., Haggerty, Kevin P., & Fleming, Charles B. (2002)
- <sup>86</sup> Kumpfer, K. L. & DeMarsh, J. (1986)
- <sup>87</sup> Kumpfer, K. L. & DeMarsh, J. (1986)
- <sup>88</sup> Hogan, D. M. (1998)
- <sup>89</sup> Hogan, D. M. (1998)

- <sup>90</sup> Hogan, D. M. (1998)
   <sup>91</sup> Smith, A. E., Jussim, L., & Eccles, J. (1999)

- <sup>91</sup> Smith, A. E., Jussim, L., & Eccles, J. (1999)
  <sup>92</sup> Hogan, D. M. (1998)
  <sup>93</sup> Austin, G. & Prendergast, M. (1991)
  <sup>94</sup> Dube, Shanta R. et al. (2001)
  <sup>95</sup> Austin, G. & Prendergast, M. (1991)
  <sup>96</sup> Barrera, M. & Stice, E. (1998); Chassin, L., Pillow, D. R., Curran, P. J., Molina, B. S., & Barrera, M. (1993); Kaplan, H. B., Martin, S. S., & Robbins, C. (1984)
  <sup>97</sup> Hoffmann, J. P. & Su, S. S. (1998)
  <sup>98</sup> Richter, Linda, Chatterji, Pinka, & Pierce, James. (2000)
  <sup>99</sup> Hussong, Andrea M. & Chassin, Laurie. (2002)
  <sup>100</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004e)

#### **Chapter IV** Notes

<sup>1</sup> Grunbaum, J. A. et al. (2004)

<sup>2</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>3</sup> Chassin, L., Presson, C. C., Rose, J. S., & Sherman, S. J. (1998)

<sup>4</sup> Farkas, A. J., Distefan, B. A., Choi, W. S., Gilpin, E. A., & Pierce, J. P. (1999)

<sup>5</sup> den Exter Blokland, Endy A. W., Engels, Ruger C. M. E., Hale, William W., Meeus, Wim, & Willemsen, Marc C. (2004) <sup>6</sup> A = -1

Andersen, M. Robyn, Leroux, Brian G., Bricker, Jonathan B., Rajan, Kumar Bharat, & Peterson, Arthur V. (2004) <sup>7</sup> U.S. Department of Health and Human Services,Office of Inspector General. (1991)

<sup>8</sup> Harrison, P. A., Fulkerson, J. A., & Park, E. (2000); Jones-Webb, R. et al. (1997); U.S. Department of Health and Human Services, Office of Inspector General. (1991); Wagenaar, A. C. et al. (1996)

<sup>9</sup> Harrison, P. A., Fulkerson, J. A., & Park, E. (2000)

<sup>10</sup> Barnes, G. M., Dintcheff, B. A., Farrell, M. P., Reifman, A., & Uhteg, L. (1998); Barnes, G. M. & Farrell, M. P.

(1992); Chilcoat, H. D. & Anthony, J. C. (1996); Radziszewska, B., Richardson, J. L., Dent, C. W., & Flay, B. R. (1996); Zucker, R. A. & Fitzgerald, H. E. (1991) <sup>11</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002b)

<sup>12</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1996)

<sup>13</sup> Bogenschneider, K., Raffaelli, M., Tsay, J. C., & Wu, M. (1998)

<sup>14</sup> Barnes, Grace M., Reifman, Alan S., Farrell, Michael P., & Dintcheff, Barbara A. (2000); Richards, Marvse H., Miller, Bobbi Viegas, O'Donnell, Philip C., Wasserman, Michelle S., & Colder, Craig. (2004)

<sup>15</sup> Kung, Eva M. & Farrell, Albert D. (2000)

<sup>16</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)

<sup>17</sup> Mulhall, Peter F., Stone, Donald, & Stone, Brian. (1996)

<sup>18</sup> Mulhall, Peter F., Stone, Donald, & Stone, Brian. (1996)

<sup>19</sup> Barnes, G. M. & Farrell, M. P. (1992)

<sup>20</sup> Barnes, G. M. & Farrell, M. P. (1992); Radziszewska, B., Richardson, J. L., Dent, C. W., & Flay, B. R. (1996)

<sup>21</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003a)

<sup>22</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003a)

<sup>23</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)

<sup>24</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)

<sup>25</sup> Grunbaum, J. A. et al. (2004)

<sup>26</sup> Grunbaum, J. A. et al. (2004)

<sup>27</sup> Grunbaum, J. A. et al. (2004)

<sup>28</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>29</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>30</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002a)

<sup>31</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)

<sup>32</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1997a)

<sup>33</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b)

<sup>34</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>35</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001b)

<sup>36</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b)

<sup>37</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b)

<sup>38</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b)

<sup>39</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d) <sup>40</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>41</sup> Brody, G. H, Flor, D. L., Hollet-Wright, N., McCoy, J. K., & Donovan, J. (1999); McMaster, L. E. & Wintre, M.

(1996) <sup>42</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003)

<sup>43</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b)

<sup>44</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b)

<sup>45</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1997a)

<sup>46</sup> Jackson, C., Henriksen, L., & Dickinson, D. (1999)

<sup>47</sup> Hazelden Foundation. (1998)

<sup>48</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)

<sup>49</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>50</sup> Benard, B. (1991)

<sup>51</sup> Anderson, A. R. & Henry, C. S. (1994); Aseltine, R. H., Colten, M. E., & Gore, S. (1998); Barnes, G. M. &

Farrell, M. P. (1992); Henry, Carolyn S., Robinson, Linda C., & Wilson, Stephan M. (2003)

<sup>52</sup> Henry, Carolyn S., Robinson, Linda C., & Wilson, Stephan M. (2003)

<sup>53</sup> Adlaf, E. M. & Ivis, F. J. (1996); Gerrard, M., Gibbons, F. X., Zhao, L., Russell, D. W., & Reis-Bergan, M. (1999)

<sup>54</sup> Kafka, R. R. & London, P. (1991); McArdle, Paul et al. (2002)

<sup>55</sup> Andrews, J. A., Hops, H., Ary, D., Tildesley, E., & Harris, J. (1993); Distefan, J. M., Gilpin, E. A., Choi, W. S., & Pierce, J. P. (1998)

<sup>56</sup> Henriksen, L. & Jackson, C. (1998)

<sup>57</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b)

<sup>58</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>59</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>60</sup> Partnership for a Drug-Free America. (2000)

<sup>61</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>62</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>63</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)

<sup>64</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c)

<sup>65</sup> Catalano, R. F. et al. (1992)

<sup>66</sup> Noller, P. (1995)

<sup>67</sup> Andrews, J. A., Hops, H., Ary, D., Tildesley, E., & Harris, J. (1993)

- <sup>68</sup> Poole, Millicent E. & Gelder, Amanda J. (1984)
- <sup>69</sup> Furman, Wyndol & Buhrmester, Duane. (1992)

<sup>70</sup> Ellickson, Phyllis L., Orlando, Maria, Tucker, Joan S., & Klein, David J. (2004)

<sup>71</sup> Peterson, P. L., Hawkins, J. D., Abbott, R. D., & Catalano, R. F. (1994)

<sup>72</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003d)

<sup>73</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003d)

<sup>74</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d)

<sup>75</sup> Bennett, Linda A., Wolin, Steven J., & Reiss, David. (1988)

<sup>76</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>77</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>78</sup> Wright, Douglas & Pemberton, Michael. (2004)

<sup>79</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002a)

<sup>80</sup> Needle, Richard et al. (1986); Vakalahi, Halaevalu F., Harrison, R. Steven, & Janzen, Frederick V. (2000)

<sup>81</sup> Rose, Richard J. (1998); Furman, Wyndol & Buhrmester, Duane. (1992); Avenevoli, Shelli & Marikangas, Kathleen Ries. (2003)

<sup>82</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002a)

<sup>83</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002a)

<sup>84</sup> Benard, B. (1991); Resnick, M. D. et al. (1997); Rhodes, J. E. & Jason, L. A. (1988)

<sup>85</sup> Wright, Douglas & Pemberton, Michael. (2004)

<sup>86</sup> Werner, Emmy E. & Johnson, Jeannette L. (2004)

<sup>87</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>88</sup> Bahr, Stephen J., Maughan, Suzanne L., Marcos, Anastasios C., & Li, Bingdao. (1998)

<sup>89</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001c)

<sup>90</sup> Hadaway, C. K., Elifson, K. W., & Petersen, D. M. (1984); Richter, Linda & Richter, Daniel M., 2001; Weinberg,

N. Z., Dielman, T. E., Mandell, W., & Shope, J. T. (1994); Andrews, J. A., Hops, H., Ary, D., Tildesley, E., &

Harris, J. (1993); Chassin, L., Pillow, D. R., Curran, P. J., Molina, B. S., & Barrera, M. (1993); Pandina, R. J. &

Johnson, V. (1989); The National Center on Addiction and Substance Abuse (CASA) at Columbia University.

(2001c); The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c) <sup>91</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999a)

<sup>92</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001c)

#### Chapter V Notes

<sup>1</sup> National Youth Anti-Drug Media Campaign. (2004); Emedicine.com. (2004)

<sup>2</sup> Emedicine.com. (2004); Oklahoma D.A.R.E. (2004)

- <sup>3</sup> Substance Abuse and Mental Health Services Administration. (2004d)
- <sup>4</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004c)

<sup>5</sup> Kumpfer, Karol L. & Bluth, Barye. (2004); Kumpfer, Karol L. (2002)

- <sup>6</sup> Kumpfer, Karol L. (2002)
- <sup>7</sup> Foxcroft, D. R., Ireland, D., Lister-Sharp, D. J., Lowe, G., & Breen, R. (2003)
- <sup>8</sup> Austin, G. & Prendergast, M. (1991); Emshoff, J. G. & Price, A. W. (1999)
- <sup>9</sup> Austin, G. & Prendergast, M. (1991)
- <sup>10</sup> Betty Ford Center. (2004)
- <sup>11</sup> Hazelden Foundation. (2004)
- <sup>12</sup> Hazelden Foundation. (2004)
- <sup>13</sup> Phoenix House. (2004)
- <sup>14</sup> Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. (2004a)
- <sup>15</sup> Winters, Ken C. (1999)
- <sup>16</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2000)
- <sup>17</sup> Knight, John R., Sherritt, Lon, Harris, Sion Kim, Gates, Elizabeth C., & Chang, Grace. (2003)
- <sup>18</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2000)
- <sup>19</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2000)
- <sup>20</sup> Fleming, Michael & Manwell, Linda Baier. (1999)
- <sup>21</sup> Fleming, Michael & Manwell, Linda Baier. (1999)
- <sup>22</sup> National Student Assistance Association. (1999)
- <sup>23</sup> Emshoff, J. G. & Price, A. W. (1999)
- <sup>24</sup> Deck, Dennis D. & Bergeson, Terry. (2004); Office of Elementary and Secondary School Services. (1998);
- Milgram, G. G. (1998); Scott, D. M., Surface, J. L., Friedli, D., & Barlow, T. W. (1999)
- <sup>25</sup> Catalano, Richard. (2001)
- <sup>26</sup> Evenson, R. C., Binner, P. R., Cho, D. W., Schicht, W. W., & Topolski, J. M. (1997)
- <sup>27</sup> Hutchins, F. (2000)
- <sup>28</sup> Evenson. (1997); Stringer. (2004)
- <sup>29</sup> Operation PAR. (2004)
- <sup>30</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2000)
- <sup>31</sup> Higgins, S. T., Budney, A. J., Bickel, W. K., & Badger, G. J. (1994); Liepman, M. R., Nirenberg, T. D., & Begin, A. M. (1989)
- <sup>32</sup> Loneck, B., Garrett, J. A., & Banks, S. M. (1996)
- <sup>33</sup> Miller, William R., Meyers, Robert J., & Hiller-Sturmhöfel, Susanne. (1999); Life Link. (2003)
- <sup>34</sup> Life Link. (2003)
- <sup>35</sup> Al-Anon Family Groups & Southeastern Institute of Research. (2004)
- <sup>36</sup> Al-Anon Family Group Headquarters. (2004)
- <sup>37</sup> Al-Anon Family Groups. (2004)
- <sup>38</sup> Weber, J. A. & McCormick, P. (1992)
- <sup>39</sup> Al-Anon Family Groups. (2004)
- <sup>40</sup> Adult Children of Alcoholics World Service Organization. (2004)
- <sup>41</sup> Families Anonymous. (2004)
- <sup>42</sup> National Association for Children of Alcoholics. (2004)
- <sup>43</sup> Children of Alcoholics Foundation. (2004)

#### **Bibliography**

- Abel, E. L., & Sokol, R. J. (1986). Fetal alcohol syndrome is now the leading cause of mental retardation. *Lancet*, 2(8517), 1222.
- Abel, E. L., & Sokol, R. J. (1987). Incidence of fetal alcohol syndrome and economic impact of FAS-related anomalies. *Drug and Alcohol Dependence*, *19*(1), 51-70.
- Adlaf, E. M., & Ivis, F. J. (1996). Structure and relations: The influence of familial factors on adolescent substance use and delinquency. *Journal of Child and Adolescent Substance Abuse*, 5(3), 1-19.
- Adult Children of Alcoholics World Service Organization. (2004). *Adult Children of Alcoholics World Service Organization website*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.adultchildren.org/.
- Al-Anon Family Group Headquarters. (2004). *Al-Anon/Alateen website*. [On-line]. Retrieved June 1, 2004 from the World Wide Web: http://www.al-anon.org.
- Al-Anon Family Groups. (2004). Who are the members of Al-Anon and Alateen? 2003 survey results in the US and Canada [Pamphlet]. Virginia Beach, VA: Al-Anon Family Group Headquarters.
- Al-Anon Family Groups, & Southeastern Institute of Research. (2004). 2003 Al-Anon/Alateen membership survey. [On-line]. Retrieved June 4, 2004 from the World Wide Web: http://www.al-anon/alateen.org.
- Aligne, C. A., & Stoddard, J. J. (1997). Tobacco and children: An economic evaluation of the medical effects of parental smoking. *Archives of Pediatrics and Adolescent Medicine*, 151(7), 648-653.
- Alleyne, B. C., Stuart, P., & Copes, R. (1991). Alcohol and other drug use in occupational fatalities. *Journal of Occupational Medicine*, *33*(4), 495-500.
- American Lung Association. (2003). *Search LungUSA*. [On-line]. Retrieved May 3, 2003 from the World Wide Web: http://www.lungusa.org.
- Andersen, M. R., Leroux, B. G., Bricker, J. B., Rajan, K. B., & Peterson, A. V. (2004). Antismoking parenting practices are associated with reduced rates of adolescent smoking. *Archives of Pediatrics and Adolescent Medicine*, 158(4), 348-352.
- Anderson, A. R., & Henry, C. S. (1994). Family system characteristics and parental behaviors as predictors of adolescent substance use. *Adolescence*, 29(114), 405-420.
- Andrews, J. A., Hops, H., Ary, D., Tildesley, E., & Harris, J. (1993). Parental influence on early adolescent substance use: Specific and nonspecific effects. *Journal of Early Adolescence*, 13(3), 285-310.
- Aseltine, R. H., Colten, M. E., & Gore, S. (1998). The co-occurrence of depression and substance abuse in late adolescence. *Development and Psychopathology*, *10*(3), 549-570.

- Austin, G., & Prendergast, M. (1991). Young children of substance abusers: Prevention research update no. 8. Portland, OR: Northwest Regional Educational Laboratory.
- Avenevoli, S., & Marikangas, K. R. (2003). Familial influences on adolescent smoking. *Addiction, 98*(Suppl. 1), 1-20.
- Bahr, S. J., Maughan, S. L., Marcos, A. C., & Li, B. (1998). Family, religiosity, and the risk of adolescent drug use. *Journal of Marriage and the Family*, 60(4), 979-992.
- Bailey, J. E., Kellermann, A. L., Somes, G. W., Banton, J. G., Rivara, F. P., & Rushforth, N. P. (1997). Risk factors for violent death of women in the home. *Archives of Internal Medicine*, 157(7), 777-782.
- Barnard, M. (1999). Forbidden questions: Drug-dependent parents and the welfare of their children. Addiction, 94(8), 1109-1111.
- Barnes, G. M., Dintcheff, B. A., Farrell, M. P., Reifman, A., & Uhteg, L. (1998). Parental and peer influences on the onset of heavier drinking among adolescents. *Journal of Studies on Alcohol*, 59(3), 311-317.
- Barnes, G. M., & Farrell, M. P. (1992). Parental support and control as predictors of adolescent drinking, delinquency, and related problem behaviors. *Journal of Marriage and the Family*, 54(4), 763-776.
- Barnes, G. M., Reifman, A. S., Farrell, M. P., & Dintcheff, B. A. (2000). The effects of parenting on the development of adolescent alcohol misuse: A six-wave latent growth model. *Journal of Marriage and the Family*, 62(1), 175-186.
- Barrera, M., Chassin, L., & Li, S. A. (1995). Effects of parental alcoholism and life stress on Hispanic and non-Hispanic Caucasian adolescents: A prospective study. *American Journal of Community Psychology*, 23(4), 479-507.
- Barrera, M., & Stice, E. (1998). Parent-adolescent conflict in the context of parental support: Families with alcoholic and nonalcoholic fathers. *Journal of Family Psychology*, 12(2), 195-208.
- Bauman, P. S., & Dougherty, F. E. (1983). Drug-addicted mothers' parenting and their children's development. *International Journal of the Addictions*, 18(3), 291-302.
- Becker, A. B., Manfreda, J., Ferguson, A. C., Dimich-Ward, H., Watson, W. T., & Chan-Yeung, M. (1999). Breast-feeding and environmental tobacco smoke exposure. *Archives of Pediatrics and Adolescent Medicine*, 153(7), 689-691.
- Belcher, H. M., & Shinitzky, H. E. (1998). Substance abuse in children: Prediction, protection, and prevention. Archives of Pediatrics and Adolescent Medicine, 152(10), 952-960.
- Benard, B. (1991). Fostering resiliency in kids: Protective factors in the family, school, and community. [On-line]. Retrieved June 25, 2004 from the World Wide Web: http://www.nwrac.org.

- Bennett, E. M., & Kempter, K. J. (1994). Is abuse during childhood a risk factor for developing substance abuse problems as an adult? *Developmental and Behavioral Pediatrics*, 15(6), 426-429.
- Bennett, L. A., Wolin, S. J., & Reiss, D. (1988). Deliberate family process: A strategy for protecting children of alcoholics. *British Journal of Addiction*, 83(7), 821-829.
- Betty Ford Center. (2004). *Betty Ford Center website*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.bettyfordcenter.org/.
- Bierut, L. J., Dinwiddie, S. H., Begleiter, H., Crowe, R. R., Hesselbrock, V., Nurnberger, J. I., et al. (1998). Familial transmission of substance dependence: Alcohol, marijuana, cocaine, and habitual smoking: A report from the collaborative study on the genetics of alcoholism. *Archives of General Psychiatry*, 55(11), 982-988.
- Bogenschneider, K., Raffaelli, M., Tsay, J. C., & Wu, M. (1998). "Other teens drink, but not my kid": Does parental awareness of adolescent alcohol use protect adolescents from risky consequences? *Journal of Marriage and the Family*, 60(2), 356-373.
- Brady, J. P., Posner, M., Lang, C., & Rosati, M. J. (1994). Risk and reality: The implications of prenatal exposure to alcohol and other drugs. Rockville, MD: U.S. Department of Health and Human Services, U. S. Department of Education, Educational Development Center.
- Brody, G. H., Flor, D. L., Hollet-Wright, N., McCoy, J. K., & Donovan, J. (1999). Parent-child relationships, child temperament profiles and children's alcohol use norms. *Journal of Studies on Alcohol, Suppl. 13*, 45-51.
- Butterfield, F. (2004, February 23). Home drug-making laboratories expose children to toxic fallout. *New York Times*, A1.
- Butz, A. M., Kaufmann, W. E., Royall, R., Kolodner, K., Pulsifer, M. B., Lears, M. K., et al. (1999). Opiate and cocaine exposed newborns: Growth outcome. *Journal of Child and Adolescent Substance Abuse*, 8(4), 1-16.
- Caces, M. F., Harford, T. C., Williams, G. D., & Hanna, E. Z. (1999). Alcohol consumption and divorce rates in the United States. *Journal of Studies on Alcohol*, 60(5), 647-652.
- Califano, J. A. (2000, January 15). Winning the war on drugs: It's all in the family. *America*, *182*(2), 6-8.
- California Environmental Protection Agency. (1997). *Health effects of exposure to environmental tobacco*. Sacramento: CA: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment.
- Campaign for Tobacco-Free Kids. (2004). *State cigarette prices, and costs per pack*. [On-line]. Retrieved May 17, 2004 from the World Wide Web: http://www.tobaccofreekids.org.
- Carvalho, V., Pinsky, I., De Souza, E., Silva, R., & Carlini-Cotrim, B. (1995). Drug and alcohol use and family characteristics: A study among Brazilian high-school students. *Addiction*, *90*(1), 65-72.

- Casper, L. M., & Bryson, K. R. (1998). *Co-resident grandparents and their grandchildren: Grandparent maintained families* (GPO Item No. 0154-B-55 MF). Washington, DC: U.S. Government Printing Office.
- Catalano, R. F., Morrison, D. M., Wells, E. A., Gillmore, M. R., Iritani, B., & Hawkins, J. D. (1992). Ethnic differences in family factors related to early drug initiation. *Journal of Studies on Alcohol*, 53(3), 208-217.
- Catalano, R. (2001). *Focus on Families*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.strengtheningfamilies.org.
- Centers for Disease Control and Prevention. (2004). Child passenger deaths involving drinking drivers: United States, 1997-2002. *Morbidity and Mortality Weekly Report*, 53(4), 77-79.
- Chaffin, M., Kelleher, K., & Hollenberg, J. (1996). Onset of physical abuse and neglect: Psychiatric, substance abuse, and social risk factors from prospective community data. *Child Abuse and Neglect*, 20(3), 191-203.
- Chase, N. D., Deming, M. P., & Wells, M. C. (1998). Parentification, parental alcoholism, and academic status among young adults. *American Journal of Family Therapy*, 26(2), 105-114.
- Chassin, L., Pillow, D. R., Curran, P. J., Molina, B. S., & Barrera, M. (1993). Relation of parental alcoholism to early adolescent substance use: A test of three mediating mechanisms. *Journal of Abnormal Psychology*, 102(1), 3-19.
- Chassin, L., Pitts, S. C., DeLucia, C., & Todd, M. (1999). A longitudinal study of children of alcoholics: Predicting young adult substance use disorders, anxiety, and depression. *Journal of Abnormal Psychology*, 108(1), 106-199.
- Chassin, L., Presson, C. C., Rose, J. S., & Sherman, S. J. (1998). Maternal socialization of adolescent smoking: Intergenerational transmission of smoking-related beliefs. *Psychology of Addictive Behaviors*, 12(3), 206-216.
- Chassin, L., Rogosch, F., & Barrera, M. (1991). Substance use and symptomatology among adolescent children of alcoholics. *Journal of Abnormal Psychology*, *100*(4), 449-463.
- Chilcoat, H. D., & Anthony, J. C. (1996). Impact of parent monitoring on initiation of drug use through late childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35(1), 91-100.
- Children of Alcoholics Foundation. (1990). *Children of alcoholics in the medical system: Hidden problems, hidden costs.* New York: Children of Alcoholics Foundation.
- Children of Alcoholics Foundation. (2004). *Children of Alcoholics Foundation website*. [Online]. Retrieved August 19, 2004 from the World Wide Web: http://www.coaf.org.
- Children's Defense Fund. (2000). *The state of America's children yearbook 2000*. Washington, DC: Children's Defense Fund.

- Children's Defense Fund. (2004). *Defining poverty and why it matters for children*. [On-line]. Retrieved September 10, 2004 from the World Wide Web: http://www.childrensdefense.org.
- Clark, D. B., Moss, H. B., Kirisci, L., Mezzich, A. C., Miles, R., & Ott, P. (1997).
   Psychopathology in preadolescent sons of fathers with substance use disorders. *Journal* of the American Academy of Child and Adolescent Psychiatry, 36(4), 495-502.
- Clark, R. E. (1994). Family costs associated with severe mental illness and substance use. *Hospital and Community Psychiatry*, 45(8), 808-813.
- Colder, C. R., Chassin, L., Curran, P. J., & Stice, E. M. (1997). Alcohol expectancies as potential mediators of parent alcoholism effects on the development of adolescent heavy drinking. *Journal of Research on Adolescence*, 7(4), 349-374.
- Conners, N. A., Bradley, R. H., Mansell, L. W., Liu, J. Y., Roberts, T. J., Burgdorf, K., et al. (2004). Children of mothers with serious substance abuse problems: An accumulation of risks. *American Journal of Drug and Alcohol Abuse*, 30(1), 85-100.
- Crawford, A. M., Pentz, M. A., Chou, C.-P., Li, C., & Dwyer, J. H. (2003). Parallel developmental trajectories of sensation seeking and regular substance use in adolescents. *Psychology of Addictive Behaviors*, 17(3), 179-192.
- Cunardi, C. B., Caetano, R., Clark, C. L., & Schafer, J. (1999). Alcohol-related problems and intimate partner violence among white, black, and Hispanic couples in the U.S. *Alcoholism: Clinical and Experimental Research*, 23(9), 1492-1501.
- Davis, R. M. (1998). Exposure to environmental tobacco smoke: Identifying and protecting those at risk. *JAMA*, 280(22), 1947-1949.
- Dawson, D. A., Grant, B. F., & Harford, T. C. (1992). Parental history of alcoholism and probability of marriage. *Journal of Substance Abuse*, 4(2), 117-129.
- Day, N. L., & Richardson, G. A. (2004). An analysis of the effects of prenatal alcohol exposure on growth: A teratologic model. *American Journal of Medical Genetics Part C: Seminars* in Medical Genetics, 127C(1), 28-34.
- Deck, D. D., & Bergeson, T. (2004). Addressing adolescent substance abuse: An evaluation of Washington's Prevention and Intervention Services Program. Olympia, WA: Office of Superintendent of Public Instruction.
- Deleire, T., & Kalil, A. (2002). Good things come in threes: Single-parent multigenerational family structure and adolescent adjustment. *Demography*, *39*(2), 393-413.
- den Exter Blokland, E. A. W., Engels, R. C. M. E., Hale, W. W., Meeus, W., & Willemsen, M. C. (2004). Lifetime parental smoking history and cessation and early adolescent smoking behavior. *Preventive Medicine*, 38(3), 359-368.
- Deren, S. (1986). Children of substance abusers: A review of the literature. *Journal of Substance Abuse Treatment*, 3(2), 77-94.

- DiFranza, J. R., & Lew, R. A. (1996). Morbidity and mortality in children associated with the use of tobacco products by other people. *Pediatrics*, 97(4), 560-568.
- Distefan, J. M., Gilpin, E. A., Choi, W. S., & Pierce, J. P. (1998). Parental influences predict adolescent smoking in the United States, 1989-1993. *Journal of Adolescent Health*, 22(6), 466-474.
- Drug Enforcement Administration. (2003). *Fast facts about meth*. [On-line]. Retrieved August 18, 2004 from the World Wide Web: http://www.usdoj.gov/dea.
- Dube, S. R., Anda, R. F., Felitti, V. J., Croft, J. B., Edwards, V. J., & Giles, W. H. (2001). Growing up with parental alcohol abuse: Exposure to childhood abuse, neglect, and household dysfunction. *Child Abuse and Neglect*, 25(12), 1627-1640.
- Dubowitz, H., Black, M. M., Kerr, M. A., Starr, R. H., & Harrington, D. (2000). Fathers and child neglect. Archives of Pediatrics and Adolescent Medicine, 154(2), 135-141.
- Duncan, T. E., Hops, H., Tildesley, E., & Duncan, S. C. (1995). The consistency of family and peer influences on the development of substance use in adolescence. *Addiction*, 90(12), 1647-1660.
- Earls, F., Reich, W., Jung, K. G., & Cloninger, C. R. (1988). Psychopathology in children of alcoholic and antisocial parents. *Alcoholism: Clinical and Experimental Research*, 12(4), 481-487.
- Ebrahim, S. H., & Gfroerer, J. (2003). Pregnancy-related substance use in the United States during 1996-1998. *Obstetrics and Gynecology*, *101*(2), 374-379.
- Eiden, R. D., Peterson, M., & Coleman, T. (1999). Maternal cocaine use and the caregiving environment during early childhood. *Psychology of Addictive Behaviors*, 13(4), 293-302.
- Ellickson, P. L., Orlando, M., Tucker, J. S., & Klein, D. J. (2004). From adolescence to young adulthood: Racial/ethnic disparities in smoking. *American Journal of Public Health*, 94(2), 293-299.
- Ellis, D. A., Zucker, R. A., & Fitzgerald, H. E. (1997). The role of family influences in development and risk. *Alcohol Health and Research World*, *21*(3), 218-226.
- Emedicine.com. (2004). *Substance abuse symptoms*. [On-line]. Retrieved September 7, 2004 from the World Wide Web: http://www.emedicinehealth.com.
- Emshoff, J. G., & Price, A. W. (1999). Prevention and intervention strategies with children of alcoholics. *Pediatrics*, 103(5, Pt. 2), 1112-1121.
- Evenson, R. C., Binner, P. R., Cho, D. W., Schicht, W. W., & Topolski, J. M. (1997). On outcome study of Missouri's CSTAR alcohol and drug abuse programs. *Journal of Substance Abuse Treatment*, 15(2), 143-150.
- Eyler, F. D., & Behnke, M. (1999). Early development of infants exposed to drugs prenatally. *Clinics in Perinatology*, 26(1), 107-150.

- Fals-Stewart, W. (2003). The occurrence of partner physical aggression on days of alcohol consumption: A longitudinal diary study. *Journal of Consulting and Clinical Psychology*, 71(1), 41-52.
- Fals-Stewart, W., Golden, J., & Schumacher, J. A. (2003). Intimate partner violence and substance use: A longitudinal day-to-day examination. *Addictive Behaviors*, 28(9), 1555-1575.
- Families Anonymous. (2004). *Families Anonymous website*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.familiesanonymous.org/.
- Famy, C., Streissguth, A. P., & Unis, A. S. (1998). Mental illness in adults with fetal alcohol syndrome or fetal alcohol effects. *American Journal of Psychiatry*, 155(4), 552-554.
- Farkas, A. J., Distefan, B. A., Choi, W. S., Gilpin, E. A., & Pierce, J. P. (1999). Does parental smoking cessation discourage adolescent smoking? *Preventive Medicine*, 28(3), 213-218.
- Fauci, A. S., Braunwald, E., Isselbacher, K. J., Wilson, J. D., Martin, J. B., Kasper, D. L., et al. (1999). *Harrison's principles of internal medicine*. New York: McGraw-Hill.
- Federal Interagency Forum on Child and Family Statistics. (2004). *America's children in brief: Key national indicators of well-being, 2004: With detailed tables.* [On-line]. Retrieved September 2, 2004 from the World Wide Web: http://www.childstats.gov.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245-258.
- Finn, P. R., & Justus, A. (1997). Physiological responses in sons of alcoholics. *Alcohol Health* and Research World, 21(3), 227-231.
- Fleming, M., & Manwell, L. B. (1999). Brief intervention in primary care settings: A primary treatment method for at-risk, problem, and dependent drinkers. *Alcohol Research and Health*, 23(2), 128-137.
- Foxcroft, D. R., Ireland, D., Lister-Sharp, D. J., Lowe, G., & Breen, R. (2003). Longer-term primary prevention for alcohol misuse in young people: A systematic review. *Addiction*, 98(4), 397-411.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63(1), 103-115.
- Galaif, E. R., Stein, J. A., Newcomb, M. D., & Bernstein, D. P. (2001). Gender differences in the prediction of problem alcohol use in adulthood: Exploring the influence of family factors and childhood maltreatment. *Journal of Studies on Alcohol*, 62(4), 486-493.
- Garnefski, N., & Arends, E. (1998). Sexual abuse and adolescent maladjustment: Differences between male and female victims. *Journal of Adolescence*, 21(1), 99-107.

- Gergen, P. J., Fowler, J. A., Maurer, K. R., Davis, W. W., & Overpeck, M. D. (1998). The burden of environmental tobacco smoke exposure on the respiratory health of children 2 months through 5 years of age in the United States: Third National Health and Nutrition Examination Survey, 1988 to 1994. *Pediatrics, 10*(2), e8.
- Gerrard, M., Gibbons, F. X., Zhao, L., Russell, D. W., & Reis-Bergan, M. (1999). The effect of peers' alcohol consumption on parental influence: A cognitive mediational model. *Journal of Studies on Alcohol, Suppl. 13*, 32-44.
- Glaser, R., Kiecolt-Glaser, J. K., Marucha, P. T., MacCallum, R. C., Laskowski, B. F., & Malarkey, W. B. (1999). Stress-related changes in proinflammatory cytokine production in wounds. *Archives of General Psychiatry*, 56(5), 450-456.
- Grant, B. F. (2000). Estimates of US children exposed to alcohol abuse and dependence in the family. *American Journal of Public Health*, *90*(1), 112-115.
- Griffin, K. W., Botvin, G. J., Scheier, L. M., Doyle, M. M., & Williams, C. (2003). Common predictors of cigarette smoking, alcohol use, aggression, and delinquency among innercity minority youth. *Addictive Behaviors*, 28(6), 1141-1148.
- Grisso, J. A., Schwarz, D. F., Hirschinger, N., Sammel, M., Brensinger, C., Santana, J., et al. (1999). Violent injuries among women in an urban area. *New England Journal of Medicine*, 341(25), 1899-1905.
- Grunbaum, J. A., Kann, L., Kinchen, S., Ross, J., Hawkins, J., Lowry, R., et al. (2004). Youth Risk Behavior Surveillance: United States, 2003. *Morbidity and Mortality Weekly Report*, 53(SS-2).
- Guevara, R. E. (2003). Facing the methamphetamine problem in America: Statement before the House Committee on Government Reform, Subcommittee on Criminal Justice, Drug Policy and Human Resources: Executive Summary. [On-line]. Retrieved July 21, 2004 from the World Wide Web: http://www.usdoj.gov.
- Hackshaw, A. K. (1998). Lung cancer and passive smoking. *Statistical Methods in Medical Research*, 7(2), 119-136.
- Hadaway, C. K., Elifson, K. W., & Petersen, D. M. (1984). Religious involvement and drug use among urban adolescents. *Journal for the Scientific Study of Religion*, 23(2), 109-128.
- Harrison, P. A., Fulkerson, J. A., & Park, E. (2000). The relative importance of social versus commercial sources in youth access to tobacco, alcohol, and other drugs. *Preventive Medicine*, 31(1), 39-48.
- Hazelden Foundation. (1998). *Talking to kids about alcohol and drugs*. Center City, MN: Hazelden Foundation.
- Hazelden Foundation. (2004). *Hazelden website*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.hazelden.org.
- Hegedus, A. M., Alterman, A. I., & Tarter, R. E. (1984). Learning achievement in sons of alcoholics. *Alcoholism: Clinical and Experimental Research*, 8(3), 330-333.

- Held, J. R., Riggs, M. L., & Dorman, C. (1999). The effect of prenatal cocaine exposure on neurobehavioral outcome: A meta-analysis. *Neurotoxicology and Teratology*, 21(6), 619-625.
- Helzer, J. E., & Pryzbeck, T. R. (1988). The co-occurrence of alcoholism with other psychiatric disorders in the general population and its impact on treatment. *Journal of Studies on Alcohol*, 49(3), 219-224.
- Henriksen, L., & Jackson, C. (1998). Anti-smoking socialization: Relationship to parent and child smoking status. *Health Communication*, *10*(1), 87-101.
- Henry, C. S., Robinson, L. C., & Wilson, S. M. (2003). Adolescent perceptions of their family system, parents' behavior, self-esteem, and family life satisfaction in relation to their substance use. *Journal of Child and Adolescent Substance Abuse*, 13(2), 29-59.
- Higgins, S. T., Budney, A. J., Bickel, W. K., & Badger, G. J. (1994). Participation of significant others in outpatient behavioral treatment predicts greater cocaine abstinence. *American Journal of Drug and Alcohol Abuse*, 20(1), 47-56.
- Hill, S. Y., Lowers, L., Locke, J., Snidman, N., & Kagan, J. (1999). Behavioral inhibition in children from families at high risk for developing alcoholism. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(3), 271-272.
- Hill, S. E., Blakely, T. A., Kawachi, I., & Woodward, A. (2004). Mortality among "never smokers" living with smokers: Two cohort studies, 1981-4 and 1996-9. *British Medical Journal*, 328(7446), 988-989.
- Hoffmann, J. P. (1993). Exploring the direct and indirect family effects on adolescent drug use. *Journal of Drug Issues*, 23(3), 535-557.
- Hoffmann, J. P. (1994). Investigating the age effects of family structure on adolescent marijuana use. *Journal of Youth and Adolescence*, 23(2), 215-235.
- Hoffmann, J. P. (1995). The effects of family structure and family relations on adolescent marijuana use. *International Journal of the Addictions*, *30*(10), 1207-1241.
- Hoffmann, J. P., & Johnson, R. A. (1998). A national portrait of family structure and adolescent drug use. *Journal of Marriage and Family*, 60(3), 633-645.
- Hoffmann, J. P., & Su, S. S. (1998). Parental substance use disorder, mediating variables and adolescent drug use: A non-recursive model. *Addiction*, 93(9), 1351-1364.
- Hogan, D. M. (1998). Annotation: The psychological development and welfare of children of opiate and cocaine users: Review and research needs. *Journal of Child Psychology and Psychiatry*, 39(5), 609-620.
- Huang, L., Cerbone, F., & Gfroerer, J. (1998). Children at risk of parental substance abuse. In Substance Abuse and Mental Health Services Administration (Ed.), *Analyses of* substance abuse and treatment need issues (pp. 5-15). Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

- Hussong, A. M., Curran, P., & Chassin, L. (1998). Pathways of risk for accelerated heavy alcohol use among adolescent children of alcoholic parents. *Journal of Abnormal Child Psychology*, 26(6), 453-466.
- Hussong, A. M., & Chassin, L. (2002). Parent alcoholism and the leaving home transition. *Development and Psychopathology*, 14(1), 139-157.
- Hutchins, F. (2000). Linking services for drug-exposed infants and their families in Jackson County, Missouri. *Source*, *10*(1), 21-24.
- Ikonomidou, C., Bittigau, P., Ishimaru, M. J., Wozniak, D. F., Koch, C., Genz, K., et al. (2000). Ethanol-induced apoptotic neurodegeneration and fetal alcohol syndrome. *Science*, 287(5455), 1056-1060.
- Jackson, C., Henriksen, L., & Dickinson, D. (1999). Alcohol-specific socialization, parenting behaviors and alcohol use by children. *Journal of Studies on Alcohol*, 60(3), 362-367.
- Jacob, T., Windle, M., Seilhamer, R. A., & Bost, J. (1999). Adult children of alcoholics: Drinking, psychiatric, and psychosocial status. *Psychology of Addictive Behaviors*, 13(1), 3-21.
- Jacobson, S. W. (1999). Assessing the impact of maternal drinking during and after pregnancy. *Alcohol Health and Research World*, 21(3), 199-203.
- Jarvis, T. J., Copeland, J., & Walton, L. (1998). Exploring the nature of the relationship between child sexual abuse and substance use among women. *Addiction*, *93*(6), 865-875.
- Johnson, J. L., Leff, M., Adger, H., Macdonald, D. I., & Wenger, S. (1999). Children of substance abusers: Overview of research findings. *Pediatrics*, 103(5, Pt. 2), 1085-1099.
- Johnson, P. (2001). Dimensions of functioning in alcoholic and nonalcoholic families. *Journal of Mental Health Counseling*, 23(2), 127-136.
- Johnstone, B. (1994). Sociodemographic, environmental and cultural influences on adolescent drinking behavior. In R. A. Zucker, G. Boyd, & J. Howard (Eds.), *The development of alcohol problems: Exploring the biopsychosocial matrix of risk: NIAAA research monograph 26* (pp. 169-204). Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism.
- Jones, A. S. (2001). COAs and economic costs. *National Association for Children of Alcoholics Network*, 17(2), 4.
- Jones-Webb, R., Toomey, T. L., Miner, K., Wagenaar, A. C., Wolfson, M., & Poon, R. (1997). Why and in what context adolescents obtain alcohol from adults: A pilot study. *Substance Use and Misuse*, 32(2), 218-228.
- Kafka, R. R., & London, P. (1991). Communication in relationships and adolescent substance use: The influence of parents and friends. *Adolescence*, 26(103), 587-598.

- Kandel, D. B. (1990). Parenting styles, drug use, and children's adjustment in families of young adults. *Journal of Marriage and the Family*, 52(1), 183-196.
- Kandel, D. B., & Davies, M. (1990). Labor force experience of a national sample of adult me: The role of drug involvement. *Youth and Society*, 21(4), 411-414.
- Kantor, G. K., & Straus, M. A. (1989). Substance abuse as a precipitant of wife abuse victimizations. *American Journal of Drug and Alcohol Abuse*, 15(2), 173-189.
- Kaplan, H. B., Martin, S. S., & Robbins, C. (1984). Pathways to adolescent drug use: Selfderogation, peer influence, weakening of social controls, and early substance abuse. *Journal of Health and Social Behavior*, 25(3), 270-289.
- Kelleher, R. C., Chaffin, M., Hollenberg, J., & Fischer, E. (1994). Alcohol and drug disorders among physically abusive and neglectful parents in a community-based sample. *American Journal of Public Health*, 84(10), 1586-1590.
- Keller, T. E., Catalano, R. F., Haggerty, K. P., & Fleming, C. B. (2002). Parent figure transitions and delinquency and drug use among early adolescent children of substance abusers. *American Journal of Drug and Alcohol Abuse*, 28(3), 399-427.
- Kessler, R. C., Crum, R. M., Warner, L. A., Nelson, C. B., Schulenberg, J., & Anthony, J. C. (1997). Lifetime co-occurrence of DSM-III-R alcohol abuse and dependence with other psychiatric disorders in the national comorbidity survey. *Archives of General Psychiatry*, 54(4), 313-321.
- Kilpatrick, D. G., Acierno, R., Saunders, B., Resnick, H. S., Best, C. L., & Schnurr, P. P. (2000). Risk factors for adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology*, 68(1), 19-30.
- Knight, J. R., Sherritt, L., Harris, S. K., Gates, E. C., & Chang, G. (2003). Validity of brief alcohol screening tests among adolescents: A comparison of the AUDIT, POSIT, CAGE, and CRAFFT. *Alcoholism: Clinical and Experimental Research*, 27(1), 67-73.
- Knop, J., Teasdale, T. W., Schulsinger, F., & Goodwin, D. W. (1985). A prospective study of young men at high risk for alcoholism: School behavior and achievement. *Journal of Studies on Alcohol*, 46(4), 273-278.
- Korkman, M., Kettunen, S., & Autti-Rämö, I. (2003). Neurocognitive impairment in early adolescence following prenatal alcohol exposure of varying duration. *Child Neuropsychology*, 9(2), 117-128.
- Kropenske, V., & Howard, J. (1994). Protecting children in substance-abusing families. McLean, VA: U.S. Department of Health and Human Services, Administration for Children and Families.
- Kumpfer, K. L., Alvarado, R., & Whiteside, H. O. (2003). Family-based interventions for the substance abuse prevention. *Substance Use and Misuse*, 38(11-13), 1759-1789.
- Kumpfer, K. L., & DeMarsh, J. (1986). Family environmental and genetic influences on children's future chemical dependency. In S. Griswold-Ezekoye, K. L. Kumpfer, & W. J.

Bukoski (Eds.), *Childhood and chemical abuse: Prevention and intervention* (pp. 49-91). New York: Haworth Press.

- Kumpfer, K. L. (2002). *Strengthening Families Program*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.strengtheningfamilies.org.
- Kumpfer, K. L., & Bluth, B. (2004). Parent/child transactional processes predictive of resilience or vulnerability to "substance abuse disorders". Substance Use and Misuse, 39(5), 671-698.
- Kung, E. M., & Farrell, A. D. (2000). The role of parents and peers in early adolescent substance use: An examination of mediating and moderating effects. *Journal of Child and Family Studies*, 9(4), 509-528.
- Kyriacou, D. N., Anglin, D., Taliaferro, E., Stone, S., Tubb, T., Linden, J. A., et al. (1999). Risk factors for injury to women from domestic violence. *New England Journal of Medicine*, 341(25), 1829-1898.
- Larkby, C., & Day, N. (1999). The effects of prenatal alcohol exposure. *Alcohol Health and Research World*, *21*(3), 192-198.
- Lash, T. L., & Aschengrau, A. (1999). Active and passive cigarette smoking and the occurrence of breast cancer. *American Journal of Epidemiology*, 149(1), 5-12.
- Leonard, K. E., & Eiden, R. D. (1999). Husband's and wife's drinking: Unilateral or bilateral influences among newlyweds in a general population sample. *Journal of Studies on Alcohol*, *13*(Suppl.), 130-138.
- Lester, B. M., LaGasse, L. L., & Bigsby, R. (1998). Prenatal cocaine exposure and child development: What do we know and what do we do? *Seminars in Speech and Language*, 19(2), 123-146.
- Levenstein, S., Ackerman, S., Kiecolt-Glaser, J. K., & Dubois, A. (1999). Stress and peptic ulcer disease. JAMA, 281(1), 10-11.
- Li, G., Smith, G. S., & Baker, S. P. (1994). Drinking behavior in relation to cause of death among U.S. adults. *American Journal of Public Health*, 84(9), 1402-1406.
- Liepman, M. R., Nirenberg, T. D., & Begin, A. M. (1989). Evaluation of a program designed to help family and significant others to motivate resistant alcoholics into recovery. *American Journal of Drug and Alcohol Abuse*, 15(2), 209-221.
- Life Link. (2003). *Treatment*. [On-line]. Retrieved July 29, 2004 from the World Wide Web: http://thelifelink.org.
- Lightwood, J. M., Phibbs, C. S., & Glantz, S. A. (1999). Short-term health and economic benefits of smoking cessation: Low birth weight. *Pediatrics*, *104*(6), 1312-1320.
- Loneck, B., Garrett, J. A., & Banks, S. M. (1996). A comparison of the Johnson intervention with four other methods of referral to outpatient treatment. *American Journal of Drug and Alcohol Abuse*, 22(2), 233-246.

- Lupton, C., Burd, L., & Harwood, R. (2004). Cost of fetal alcohol spectrum disorders. *American Journal of Medical Genetics Part C: Seminars in Medical Genetics*, 127C(1), 42-50.
- Luthar, S. S., & D'Avanzo, K. (1999). Contextual factors in substance use: A study of suburban and inner-city adolescents. *Development and Psychopathology*, 11(4), 845-867.
- Malpique, C., Barrias, P., Morais, L., Salgado, M., Pinto da Costa, I., & Rodriques, M. (1998). Violence and alcoholism in the family: How are children affected? *Alcohol and Alcoholism*, 33(1), 42-46.
- Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Menacker, F., and Munson, M. L. (2003). Births: Final data for 2002. *National Vital Statistics Reports*, 52(10).
- Martinez, F. D., Wright, A. L., Taussig, L. M., & Group Health Medical Associates. (1994). The effect of paternal smoking on the birthweight of newborns whose mothers did not smoke. *American Journal of Public Health*, 84(9), 1489-1491.
- Mascola, M. A., Van Vunakis, H., Tager, I. B., Speizer, F. E., & Hanrahan, J. P. (1998). Exposure of young infants to environmental tobacco smoke: Breast-feeding among smoking mothers. *American Journal of Public Health*, 88(6), 893-896.
- Mattson, S. N., Goodman, A. M., Delis, D. C., & Riley, E. P. (1999). Executive functioning in children with heavy prenatal alcohol exposure. *Alcoholism: Clinical and Experimental Research*, 23(11), 1808-1815.
- May, P. A., Gossage, J. P., White-Country, M., Goodhart, K., Decoteau, S., Trujillo, P. M., et al. (2004). Alcohol consumption and other maternal risk factors for fetal alcohol syndrome among three distinct samples of women before, during, and after pregnancy: The risk is relative. *American Journal of Medical Genetics Part C: Seminars in Medical Genetics*, 127C(1), 10-20.
- May, P. A., & Gossage, J. P. (2001). Estimating the prevalence of Fetal Alcohol Syndrome: A summary. Alcohol Research and Health, 25(3), 159-167.
- McArdle, P., Wiegersma, A., Gilvarry, E., Kolte, B., McCarthy, S., Fitzgerald, M., et al. (2002). European adolescent substance use: The roles of family structure, function and gender. *Addiction*, 97(3), 329-336.
- McConaughy, S. H., & Achenbach, T. M. (1994). Comorbidity of empirically based syndromes in matched and general population and clinical samples. *Journal of Child Psychology and Psychiatry*, 35(6), 1141-1157.
- McCubbin, H. I., McCubbin, M. A., Thompson, A. I., & Han, S. (1999). Contextualizing family risk factors for alcoholism and alcohol abuse. *Journal of Studies on Alcohol, Suppl. 13*, 75-78.
- McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338(3), 171-179.
- McGue, M. (1997). A behavioral-genetic perspective on children of alcoholics. *Alcohol Health* and Research World, 21(3), 210-217.

- McLanahan, S., & Casper, L. (1995). Growing diversity and inequality in the American family. In R. Farley (Ed.), *State of the union: America in the 1990s: Volume 2, social trends* (pp. 1-45). New York: Russell Sage Foundation.
- McLeod, J. D. (1993). Spouse concordance for alcohol dependence and heavy drinking: Evidence from a community sample. *Alcoholism: Clinical and Experimental Research*, 17(6), 1146-1155.
- McMaster, L. E., & Wintre, M. (1996). The relations between perceived parental reciprocity, perceived parental approval, and adolescent substance use. *Journal of Adolescent Research*, *11*(4), 440-460.
- Meller, W. H., Rinehart, R., Cadoret, R. J., & Troughton, E. (1988). Specific familial transmission in substance abuse. *International Journal of the Addictions*, 23(10), 1029-1039.
- Merikangas, K. R., Stolar, M., Stevens, D. E., Goulet, J., Preisig, M. A., Fenton, B., et al. (1998). Familial transmission of substance use disorders. *Archives of General Psychiatry*, 55(11), 973-979.
- Milgram, G. G. (1998). An analysis of student assistance programs: Connecticut, New Jersey, and New York. *Journal of Drug Education*, 28(2), 107-116.
- Miller, B. A., Smyth, N. J., & Mudar, P. J. (1999). Mothers' alcohol and other drug problems and their punitiveness toward their children. *Journal of Studies on Alcohol*, 60(5), 632-642.
- Miller, W. R., Meyers, R. J., & Hiller-Sturmhöfel, S. (1999). The community-reinforcement approach. *Alcohol Research and Health*, 23(2), 116-121.
- Morabia, A., Bernstein, M., Heritier, S., & Khatchatrian, N. (1998). Relation of breast cancer with passive and active exposure to tobacco smoke. *American Journal of Epidemiology*, 143(9), 918-928.
- Moran, P. B., Vuchinich, S., & Hall, N. K. (2004). Associations between types of maltreatment and substance use during adolescence. *Child Abuse and Neglect*, 28(5), 565-574.
- Mulhall, P. F., Stone, D., & Stone, B. (1996). Home alone: Is it a risk factor for middle school youth and drug use? *Journal of Drug Education*, 26(1), 39-48.
- Munson, M. L. and Sutton, P. D. (2004). Births, marriages, divorces, and deaths: Provisional data for November 2003. *National Vital Statistics Reports*, 52(20).
- National Association for Children of Alcoholics. (2004). *National Association for Children of Alcoholics website*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.nacoa.net.
- National Student Assistance Association. (1999). *Student assistance program components*. [Online]. Retrieved 1999 from the World Wide Web: http://www.nasap.org/.
- National Cancer Institute. (1999). Health effects of exposure to environmental tobacco smoke: The report of the California Protection Agency: Smoking and tobacco control

*monograph no. 10.* Washington, DC: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute.

- National Highway Traffic Safety Administration. (2002). *Traffic safety facts 2002: Alcohol* (DOT Pub. No. HS 809 606). Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.
- National Youth Anti-Drug Media Campaign. (2004). *Suspect your teen is using drugs or drinking? A brief guide to action for parents* [Brochure]. [On-line]. Retrieved September 2, 2004 from the World Wide Web: http://www.theantidrug.com.
- Needle, R., McCubbin, H., Wilson, M., Reineck, R., Lazar, A., & Mederer, H. (1986). Interpersonal influences in adolescent drug use: The role of older siblings, parents, and peers. *International Journal of the Addictions*, 21(7), 739-766.
- Neher, L. S., & Short, J. L. (1998). Risk and protective factors for children's substance use and antisocial behavior following parental divorce. *American Journal of Orthopsychiatry*, 68(1), 154-161.
- Ness, R. B., Grisso, J. A., Hirschinger, N., Markovic, N., Shaw, L. M., Day, N. L., et al. (1999). Cocaine and tobacco use and the risk of spontaneous abortion. *New England Journal of Medicine*, 340(5), 333-339.
- Newcomb, M. D. (1995). Prospective dynamics of intoxication in the workplace: Personal and job-related predictors and consequences. *Experimental and Clinical Psychopharmacology*, *3*(1), 56-74.
- Noller, P. (1995). Parent-adolescent relationships. In M. A. Fitzpatrick & A. L. Vangelisti (Eds.), *Explaining family interactions* (pp. 77-111). Thousand Oaks, CA: Sage.
- Nurco, D. N., Blatchley, R. J., Hanlon, T. E., & O'Grady, K. E. (1999). Early deviance and related risk factors in children of narcotic addicts. *American Journal of Drug and Alcohol Abuse*, 25(1), 25-45.
- O'Farrell, T. J., Choquette, K. A., & Birchler, G. R. (1991). Sexual satisfaction and dissatisfaction in the marital relationship of male alcoholics seeking marital therapy. *Journal of Studies on Alcohol*, *52*(5), 441-447.
- O'Farrell, T. J., Choquette, K. A., Cutter, H. S. G., & Birchler, G. R. (1997). Sexual satisfaction and dysfunction in marriages of male alcoholics: Comparison with nonalcoholic maritally conflicted and nonconflicted couples. *Journal of Studies on Alcohol*, 58(1), 91-99.
- Office of Elementary and Secondary School Services. (1998). *Performance report (1997-1998): Commonwealth of Pennsylvania student assistance program.* Harrisburg, PA: Pennsylvania Department of Education, Office of Elementary and Secondary School Services.
- Oklahoma D.A.R.E. (2004). *Signs and symptoms and drug use*. [On-line]. Retrieved September 7, 2004 from the World Wide Web: http://www.oklahomadare.com.

- Operation PAR. (2004). *Operation PAR*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.operationpar.org.
- Pandina, R. J., & Johnson, V. (1989). Familial drinking history as a predictor of alcohol and drug consumption among adolescent children. *Journal of Studies on Alcohol*, *50*(3), 245-253.
- Parker, D. A., & Harford, T. C. (1988). Alcohol-related problems, marital disruption and depressive symptoms among adult children of alcohol abusers in the United States. *Journal of Studies on Alcohol, 49*(4), 306-313.
- Partnership for a Drug-Free America. (2000). *Partnership Attitude Tracking Study 1999: Parents*. [On-line]. Retrieved April 15, 2002 from the World Wide Web: http://www.drugfreeamerica.org.
- Patterson, G. R. (1986). Performance models for antisocial boys. *American Psychologist*, 41(4), 432-444.
- Peterson, P. L., Hawkins, J. D., Abbott, R. D., & Catalano, R. F. (1994). Disentangling the effects of parental drinking, family management, and parental alcohol norms on current drinking by black and white adolescents. *Journal of Research on Adolescence*, 4(2), 203-227.
- Phoenix House. (2004). *Phoenix House website*. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.phoenixhouse.org.
- Pirkle, J. L., Flegal, K. M., Bennert, J. T., Brody, D. J., Etzel, R. A., & Maurer, K. R. (1996). Exposure of the U. S. population to environmental tobacco smoke. *JAMA*, 275(16), 1233-1240.
- Poole, M. E., & Gelder, A. J. (1984). Family cohesiveness and adolescent autonomy in decisionmaking. Australian Journal of Sex, Marriage and Family, 5(2), 65-75.
- Power, C., Rodgers, B., & Hope, S. (1999). Heavy alcohol consumption and marital status: Disentangling the relationship in a national study of young adults. *Addiction*, 94(10), 1477-1487.
- Pronk, N. P., Goodman, M. J., O'Connor, P. J., & Martinson, B. C. (1999). Relationship between modifiable health risks and short-term health care charges. *JAMA*, 282(23), 2235-2239.
- Quick, J. D., Horn, R. S., & Quick, J. C. (1986). Health consequences of stress. Journal of Organizational Behavior Management, 8(2), 19-36.
- Radziszewska, B., Richardson, J. L., Dent, C. W., & Flay, B. R. (1996). Parenting style and adolescent depressive symptoms, smoking, and academic achievement: Ethnic, gender and SES differences. *Journal of Behavioral Medicine*, 19(3), 289-305.
- Regier, D. A., Farmer, M. E., Rae, D., Locke, B. Z., Keith, S. J., Judd, L. L., et al. (1990). Comorbidity of mental disorders with alcohol and other drug abuse: Results from the Epidemiologic Catchment Area (ECA) Study. *JAMA*, 264(19), 2511-2518.

- Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., et al. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *JAMA*, 278(10), 823-832.
- Rhodes, J. E., & Jason, L. A. (1988). *Preventing substance abuse among children and adolescents*. New York: Pergamon Books.
- Richards, M. H., Miller, B. V., O'Donnell, P. C., Wasserman, M. S., & Colder, C. (2004). Parental monitoring mediates the effects of age and sex on problem behaviors among African American urban young adolescents. *Journal of Youth and Adolescence*, 33(3), 221-233.
- Richter, L., Chatterji, P., & Pierce, J. (2000). Perspectives on family substance abuse: The voices of long-term Al-Anon members. *Journal of Family Social Work*, 4(4), 61-78.
- Richter, L., & Richter, D. M. (2001). Exposure to parental tobacco and alcohol use: Effects on children's health and development. *American Journal of Orthopsychiatry*, 71(2), 182-203.
- Rivara, F. P., Mueller, B. A., Somes, G., Mendoza, C. T., Rushforth, N. B., & Kellerman, A. L. (1997). Alcohol and illicit drug abuse and the risk of violent death in the home. *JAMA*, 278(7), 569-575.
- Roberts, K. S., & Brent, E. E. (1982). Physician utilization and illness patterns in families of alcoholics. *Journal of Studies on Alcohol*, 43(1), 119-128.
- Roosa, M. W., Dumka, L., & Tein, J. Y. (1996). Family characteristics as mediators of the influence of problem drinking and multiple risk status on child mental health. *American Journal of Community Psychology*, 24(5), 607-624.
- Rose, R. J. (1998). A developmental behavior-genetic perspective on alcoholism risk. *Alcohol Health and Research World*, 22(2), 131-143.
- Rotunda, R. J., & Doman, K. (2001). Partner enabling of substance use disorders: Critical review and future directions. *American Journal of Family Therapy*, 29(4), 257-270.
- Rounds-Bryant, J. L., Kristiansen, P. L., Fairbank, J. A., & Hubbard, R. L. (1998). Substance use, mental disorders, abuse, and crime: Gender comparisons among a national sample of adolescent drug treatment clients. *Journal of Child and Adolescent Substance Abuse*, 7(4), 19-34.
- Salomon, A., Bassuk, S. S., & Huntington, N. (2002). The relationship between intimate partner violence and the use of addictive substance in poor and homeless single mothers. *Violence Against Women*, 8(7), 785-815.
- Sandoz, J. (2004). Codependency? Annals of the American Psychotherapy Association, 7(2), 37.
- Sasco, A. J., & Vainio, H. (1999). From in utero and childhood exposure to prenatal smoking to childhood cancer: A possible link and the need for action. *Human and Experimental Toxicology*, 18(4), 192-201.

- Sawhill, I. V., & Chadwick, L. (1999). *Children in cities: Uncertain futures*. Washington, DC: Brookings Institution, Center on Urban and Metropolitan Policy.
- Schuckit, M. A. (1987). Biological vulnerability to alcoholism. Journal of Consulting and Clinical Psychology, 55(3), 301-309.
- Schuckit, M. A. (1994). Low level of response to alcohol as a predictor of future alcoholism. *American Journal of Psychiatry*, 151(2), 184-189.
- Scott, D. M., Surface, J. L., Friedli, D., & Barlow, T. W. (1999). Effectiveness of student assistance programs in Nebraska schools. *Journal of Drug Education*, 29(2), 165-174.
- Shen, R. Y., Hannigan, J. H., & Kapatos, G. (1999). Prenatal ethanol reduces the activity of adult midbrain dopamine neurons. *Alcoholism: Clinical and Experimental Research*, 23(11), 1801-1807.
- Sher, K. J. (1991). Psychological characteristics of children of alcoholics: Overview of research methods and findings. *Recent Developments in Alcoholism*, 9, 301-326.
- Sher, K. J., Walitzer, K. S., Wood, P. K., & Brent, E. E. (1991). Characteristics of children of alcoholics: Putative risk factors, substance use and abuse, and psychopathology. *Journal* of Abnormal Psychology, 100(4), 427-448.
- Short, J. L. (1998). Predictors of substance use and mental health of children of divorce: A prospective analysis. *Journal of Divorce and Remarriage*, 29(1/2), 147-167.
- Simantov, E., Schoen, C., & Klein, J. D. (2000). Health-compromising behaviors: Why do adolescents smoke or drink? Identifying underlying risk and protective factors. Archives of Pediatrics and Adolescent Medicine, 154(10), 1025-1033.
- Smith, A. E., Jussim, L., & Eccles, J. (1999). Do self-fulfilling prophecies accumulate, dissipate, or remain stable over time? *Journal of Personality and Social Psychology*, 77(3), 548-565.
- Smith, T. W. (1999). *The emerging 21st century American family*. Chicago: University of Chicago, National Opinion Research Center.
- Sokol-Katz, J., Dunham, R., & Zimmerman, R. (1997). Family structure versus parental attachment in controlling adolescent deviant behavior: A social control model. *Adolescence*, 32(125), 199-215.
- Soliman, S., Pollack, H. A., & Warner, K. E. (2004). Decrease in the prevalence of environmental tobacco smoke exposure in the home during the 1990s in families with children. *American Journal of Public Health*, 94(2), 314-320.
- Stanger, C., Higgins, S. T., Bickel, W. K., Elk, R., Grabowski, J., Schmitz, J., et al. (1999). Behavioral and emotional problems among children of cocaine and opiate dependent parents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(4), 421-428.

- Stein, J. A., Riedel, M., & Roteram-Borus, M. J. (1999). Parentification and its impact on adolescent children of parents with AIDS. *Family Process*, 38(2), 193-208.
- Streissguth, A. P., Barr, H. M., Bookstein, F. L., Sampson, P. D., & Olson, H. C. (1999). The long-term neurocognitive consequences of prenatal alcohol exposure: A 14-year study. *Psychological Science*, 10(3), 186-190.
- Streissguth, A. P., Barr, H. M., & Sampson, P. D. (1990). Moderate prenatal alcohol exposure: Effects on child IQ and learning problems at age 7½ years. *Alcoholism: Clinical and Experimental Research*, 14(5), 662-669.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2002). *Substance use, dependence or abuse among full-time workers: The NHSDA report.* [Online]. Retrieved May 17, 2004 from the World Wide Web: http://www.oas.samhsa.gov/.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003).
   Results from the 2002 National Survey on Drug Use and Health: National findings (DHHS Pub. No. (SMA) 03-3774). Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. (2004a). *A quick guide to finding effective alcohol and drug addiction treatment*. [On-line]. Retrieved September 7, 2004 from the World Wide Web: http://csat.samhsa.gov/12tips/.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004b). *Alcohol dependence or abuse among parents with children living in the home: The NSDUH report*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004c).
   Marital status and substance use among women: The NSDUH report. Rockville, MD:
   U.S. Department of Health and Human Services, Substance Abuse and Mental Health
   Services Administration, Office of Applied Studies.
- Substance Abuse and Mental Health Services Administration. (2004d). SAMHSA model programs: Effectives substance abuse and mental health programs for every community. [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.modelprograms.samhsa.gov/.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004e).
   Substance use among youths who had run away from home: The NSDUH report.
   Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and
   Mental Health Services Administration, Office of Applied Studies.
- Swanson, M. W., Streissguth, A. P., Sampson, P. D., & Olson, H. C. (1999). Prenatal cocaine and neuromotor outcome at four months: Effect of duration of exposure. *Journal of Developmental and Behavioral Pediatrics*, 20(5), 325-334.

- Terhune, K. W. (1992). The incidence and role of drugs in fatally injured drivers (DOT Pub. No. HS 808 065). Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.
- Testa, M., Livingston, J. A., & Leonard, K. E. (2003). Women's substance use and experiences of intimate partner violence: A longitudinal investigation among a community sample. *Addictive Behaviors*, 28(9), 1649-1664.
- Testa, M., Quigley, B. M., & Leonard, K. E. (2003). Does alcohol make a difference? Withinparticipants comparison of incidents of partner violence. *Journal of Interpersonal Violence*, 18(7), 735-743.
- Thapar, A., Fowler, T., Rice, F., Scourfield, J., van den Bree, M., Thomas, H., et al. (2003). Maternal smoking during pregnancy and attention deficit hyperactivity disorder symptoms in offspring. *American Journal of Psychiatry*, 160(11), 1985-1989.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1996). *National survey of American attitudes on substance abuse II: Teens and their parents.* New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1997a). 1997 CASA National Survey of American Attitudes on Substance Abuse III: Teens, their parents, teachers and principals. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1997b). *Substance abuse and the American woman*. New York, NY: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
   (1999a). Back to school 1999: National survey of American attitudes on substance abuse V: Teens and their parents. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (1999b). *No safe haven: Children of substance-abusing parents*. New York, NY: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2000). *Missed opportunity: National survey of primary care physicians and patients on substance abuse*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001a). *Malignant neglect: Substance abuse and America's schools*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001b). *National survey of American attitudes on substance abuse VI: Teens*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.

- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2001c). *So help me God: Substance abuse, religion and spirituality*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002a). *National survey of American attitudes on substance abuse VII: Teens, parents and siblings*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2002b). *Teen tipplers: America's underage drinking epidemic*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003a). *Food for thought: Substance abuse and eating disorders*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003b). *National Survey of American Attitudes on Substance Abuse VIII: Teens and parents*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003c). *The formative years: Pathways to substance abuse among girls and young women ages 8-22*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2003d). *The importance of family dinners*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004a). *CASA analysis of the National Survey on Drug Use and Health, 2002* [Data file]. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004b). *Family matters: Substance abuse and the American family: CASACONFERENCE April 29, 2004.* Unpublished manuscript.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004c). *The National Center on Addiction and Substance Abuse at Columbia University website.* [On-line]. Retrieved August 19, 2004 from the World Wide Web: http://www.casacolumbia.org.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004d). *The National Survey on American Attitudes on Substance Abuse IX: Teen dating practices and sexual activity*. New York: The National Center on Addiction and Substance Abuse (CASA) at Columbia University.

- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2005).
   CASA analysis of the National Survey on Drug Use and Health, 2003 [Data file].
   Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- Thompson, K. M., & Wilsnack, R. W. (1987). Parental influence on adolescent drinking: Modeling, attitudes, or conflict? *Youth and Society*, *19*(1), 22-43.
- Tronick, E. Z., & Beeghly, M. (1999). Prenatal cocaine exposure, child development, and the compromising effects of cumulative risk. *Clinics in Perinatology*, *26*(1), 151-171.
- U.S. Department of Health and Human Services, Office of Inspector General. (1991). Youth and alcohol: A national survey drinking habits, access, attitudes, and knowledge.
   Washington, DC: U.S. Department of Health and Human Services, Office of Inspector General.
- U.S. Department of the Treasury, Office of Economic Policy. (1998). *The economic costs of smoking in the United States and the benefits of comprehensive tobacco legislation* (GPO Item No. 0925 online). Washington, DC: U.S. Government Printing Office.
- U.S. Census Bureau. (2003a). Current population survey, 2001, 2002, and 2003: Annual social and economic supplements. [On-line]. Retrieved November 15, 2004 from the World Wide Web: http://www.census.gov.
- U.S. Census Bureau, Population Division. (2003b). *Marital status of people 15 years and over, by age, sex, personal earnings, race, and Hispanic origin: 1, March 2002.* [On-line]. Retrieved March 18, 2004 from the World Wide Web: http://www.census.gov.
- U.S. Census Bureau. (2003c). *Poverty: 2002 highlights*. [On-line]. Retrieved June 4, 2004 from the World Wide Web: http://www.census.gov.
- U.S. Census Bureau. (2003d). *Table HH-1: Households, by type: 1940 to present*. [On-line]. Retrieved June 14, 2003 from the World Wide Web: http://www.census.gov.
- U.S. Census Bureau. (2003e). Two married parents the norm: About 7-in-10 children live with their parents, according to Census Bureau pre-father's day release [Press release]. Washington, DC: U.S. Census Bureau.
- U.S. Census Bureau, National Center for Health Statistics. (2004). *Statistical abstract of the United States*. [On-line]. Retrieved June 14, 2004 from the World Wide Web: http://www.cdc.gov/nchs.
- Vakalahi, H. F., Harrison, R. S., & Janzen, F. V. (2000). The influence of family-based risk and protective factors on adolescent substance use. *Journal of Family Social Work*, 4(1), 21-34.
- Vaz-Serra, A., Canavarro, M. C., & Ramalheira, C. (1998). The importance of family context in alcoholism. *Alcohol and Alcoholism*, 33(1), 37-41.

- Velleman, R., & Orford, J. (1990). Young adult offspring of parents with drinking problems: Recollections of parents' drinking and immediate effects. *British Journal of Clinical Psychology*, 29(3), 297-317.
- Wachsman, L., Schuetz, S., Chan, L. S., & Wingert, W. A. (1989). What happens to babies exposed to phencyclidine (PCP) in utero? *American Journal of Drug and Alcohol Abuse*, 15(1), 31-39.
- Wagenaar, A. C., Toomey, T. L., Murray, D. M., Short, B. J., Wolfson, M., & Jones-Webb, R. (1996). Sources of alcohol for underage drinkers. *Journal of Studies on Alcohol*, 57(3), 325-333.
- Waldron, I., & Lye, D. (1989). Family roles and smoking. American Journal of Preventive Medicine, 5(3), 136-141.
- Wallace, J. M. (1999). The social ecology of addiction: Race, risk, and resilience. *Pediatrics*, 103(5, Pt. 2), 1122-1227.
- Watt, T. T. (2002). Marital and cohabiting relationships of adult children of alcoholics: Evidence from the National Survey of Families and Households. *Journal of Family Issues*, 23(2), 246-265.
- Weber, J. A., & McCormick, P. (1992). Alateen members' and non-members' understanding of alcoholism. Journal of Alcohol and Drug Education, 37(3), 74-84.
- Weinberg, N. Z. (1997). Cognitive and behavioral deficits associated with parental alcohol use. Journal of the American Academy of Child and Adolescent Psychiatry, 36(9), 1177-1186.
- Weinberg, N. Z., Dielman, T. E., Mandell, W., & Shope, J. T. (1994). Parental drinking and gender factors in the prediction of early adolescent alcohol use. *International Journal of the Addictions*, 29(1), 89-104.
- Weissman, M. M., Warner, V., Wickramaratne, P. J., & Kandel, D. B. (1999). Maternal smoking during pregnancy and psychopathology of offspring followed to adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(7), 892-899.
- Weitzman, M., Gortmaker, S., & Sobol, A. (1992). Maternal smoking and behavior problems of children. *Pediatrics*, 90(3), 342-349.
- Werner, E. E., & Johnson, J. L. (2004). The role of caring adults in the lives of children of alcoholics. Substance Use and Misuse, 39(5), 699-720.
- West, M. O., & Prinz, R. J. (1987). Parental alcoholism and child psychopathology. *Psychological Bulletin, 102*(2), 204-218.
- Williams, T. G. (1996). Substance abuse and addictive personality disorders. In F. W. Kaslow (Ed.), *Relational diagnosis and dysfunctional family patterns* (pp. 448-462). New York: John Wiley.

- Wilsnack, R. W., Wilsnack, S. C., Kristjanson, A. F., & Harris, T. B. (1998). Ten-year prediction of women's drinking behavior in a nationally representative sample. *Women's Health*, 4(3), 199-230.
- Wilsnack, S. C., Vogeltanz, N. D., Klassen, A. D., & Harris, T. R. (1997). Childhood sexual abuse and women's substance abuse: National survey findings. *Journal of Studies on Alcohol*, 58(3), 264-271.
- Wilson, G. S., McCreary, R., Kean, J., & Baxter, J. C. (1979). The development of preschool children of heroin-addicted mothers: A controlled study. *Pediatrics*, 63(1), 135-141.
- Winters, K. C. (1999). Screening and assessing adolescents for substance use disorders: Treatment Improvement Protocol (TIP) series 31 (DHHS Pub. No. (SMA) 99-3282).
  Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.
- Wright, D., & Pemberton, M. (2004). *Risk and protective factors for adolescent drug use: Findings from the 1999 National Household Survey on Drug Use* (DHHS Pub. No. SMA 04-3874). Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- Yarnold, B. M. (1999). Cigarette use among Miami's public school students, 1992: Fathers versus peers, availability, and family drug/alcohol problems. *Journal of Social Service Research*, 24(3/4), 103-131.
- Young, N. K. (1997). Effects of alcohol and other drugs on children. *Journal of Psychoactive Drugs*, 29(1), 23-42.
- Zucker, R. A., & Fitzgerald, H. E. (1991). Early developmental factors and risk for alcohol problems. *Alcohol Health and Research World*, *15*(1), 18-24.