



# Mental & Addictive Disorders

2003 STATE OF THE STATE'S HEALTH

INTERIM REPORT

Introduction

1

Global & US Burden

2 - 3

Oklahoma Data

4 - 7

Consequences

8 - 10

Recommendations

11

Conclusion

11

Board of Health

12

Board of Mental Health  
and Substance Abuse Services

13

# Introduction

For the past seven years the State Board of Health has presented an annual *State of the State's Health Report* to the citizens of Oklahoma. We have highlighted some very disturbing trends in the health of Oklahomans that may be improved if corrective actions are taken. Last year we initiated an *Interim Report*, which focused on the significant health disparities among Oklahoma's ethnic minorities. While considerable work is still needed in this area, we commend this year's legislature for creating a task force to study these issues.

This year, together with the Board of Mental Health and Substance Abuse Services, we issue the *State of the State's Health 2003 Interim Report, Mental and Addictive Disorders*. As will be seen — to the surprise of many — these disorders impose a greater burden of disability on our citizens than cardiovascular disorders or cancer! If we are to improve the health status of Oklahoma, these disorders require our attention and must be a key consideration in any call to action.

# Global & US Burden

In the mid 1990s, the World Health Organization (WHO) measured the Global Burden of Disease for the first time in the world's history. They created a measure of disability — DALYs (disability adjusted life years). It is made up of two components — years of life lost by premature death and years of life *lived* with a disability of known severity. As can be seen in Table 1, the leading cause of disability in the world is infectious disease (22.9%). But in Established Market Economies (EME) the leading cause is neuropsychiatric disorders (25.1%). This was *the* major surprise of the WHO study. (Of the world's 193 countries, about 25 are EMEs as defined by the World Bank. The United States is by far the largest.)

TBL 1 Percent of DALYs – Leading Causes

	World % DALYs	World Rank	EME* % DALYs	EME Rank
Infectious Diseases	22.9	1	2.8	9
Injuries	15.1	2	11.9	4
Neuropsychiatric Disorders	10.5	3	25.1	1
Cardiovascular Disorders	9.7	4	18.6	2
Malignant Neoplasms	5.1	7	15.0	3

\* Established Market Economies

Importantly, the study predicted that by 2020, all populations of the world will see non-communicable diseases as the leading cause of disability and death instead of infectious disease. Unipolar major depression is predicted to be the disease that will be the leading DALY producer among men and

women throughout the *developed* regions of the world, and for women among the *developing* regions of the world as well. For men in developing regions, traffic accidents are currently the leading cause of premature death and disability. In addition by 2020, the burden of the various diseases attributed to nicotine addiction will outweigh any other disease burden worldwide.

These facts will require a major shift in thinking about public health policies and programs, which traditionally have focused primarily on the control and elimination of infectious disease — still an important activity. In addition to traditional functions, the global public health community must begin focusing on population-based data related to risk behaviors and mental and addictive disorders. These data would strongly support a much greater emphasis on funding for the prevention and treatment of mental and addictive disorders than is currently the case. Also, environmental controls such as ordinances that restrict the use of tobacco products would have a considerable impact as well (World Health Organization, <<http://www.who.int/msa/mnh/ems/dalys/intro.htm>>).

We have grossly underestimated the disability imposed upon our citizens by mental and addictive disorders. The World Health Organization used the term neuropsychiatric disorders. Based on the dramatic advances in understanding the brain and its function and dysfunction, the term brain dysfunction disorders is being used with increasing frequency.

The WHO Global Burden of Disease study also identified underlying risk factors as key contributors to future disability and premature death on a global scale (see Table 2). Together, tobacco use (nicotine addiction), alcohol abuse, and illicit drug

abuse, account for 24.3% of the disability in EMEs including the U.S. In Oklahoma, the figure is even higher. Other studies identify morbid obesity, related to calorie addiction, as a risk factor second only to tobacco. These four addictive disorders — nicotine addiction, calorie addiction, alcohol abuse, and illicit drug abuse — account for more than one-third of our disabilities as measured by DALYs.

**TBL 2 Leading Risk Factors as Percent of Total DALYs in EME**

1	Tobacco	11.7%
2	Alcohol	10.3%
3	Occupation	5.0%
4	Physical Inactivity	4.8%
5	Hypertension	3.9%
6	Illicit Drugs	2.3%

The prominence of mental and addictive disorders in the United States for both men and women is obvious from Table 3, especially when one considers the fact that addictive disorders (nicotine, alcohol, calorie) are major risk factors for heart disease, cancer, stroke, and road traffic collisions.

The evidence is overwhelming. Major health problems in the United States relate to mental and addictive disorders. To respond appropriately to this fact will require a paradigmatic shift in our thinking. Our health care system is not organized toward this end. Our culture minimizes, even denies, the magnitude of the problem and many of our institutions, health professionals, and citizens act accordingly.

**TBL 3 Leading Causes of Disability (Percent of DALYs)**

**US Men**

1	Ischemic Heart Disease	10.75%
2	Unipolar Depression and Suicide	5.86%
3	Road Traffic Collisions	5.10%
4	Lung Cancer	4.44%
5	HIV/AIDS	4.22%
6	Alcohol Abuse and Dependence	4.02%

**US Women**

1	Ischemic Heart Disease	7.45%
2	Unipolar Depression and Suicide	6.71%
3	Cerebrovascular Disease	5.27%
4	Lung Cancer	3.47%
5	Osteoarthritis	3.24%
6	Breast Cancer	3.21%

Let's turn now more specifically to Oklahoma, because we are not exempt from these national trends.

# Oklahoma Data

The impact of mental and addictive disorders on the overall health status of Oklahomans is just as dramatic as has been identified for the other regions of the world. Particularly when taking into account addictive behaviors, the disproportionate burden of these disorders on the public health and the health care systems in Oklahoma becomes clearly evident.

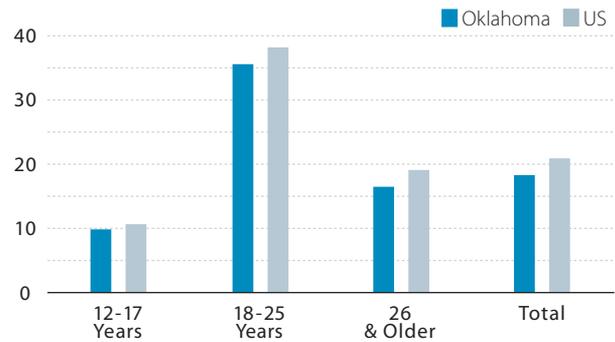
## Substance Abuse

Alcohol abuse accounts for significant disability, starting with the teenage years and lasting through the lifespan. Of particular concern is alcohol use among the younger age groups. Twenty percent of all alcohol consumed is consumed by teenagers. When combined with other risk-taking behaviors common among teens and young adults, the use of alcohol becomes deadly. The leading cause of death in teenagers is automobile accidents, often related to drinking alcohol. Use and abuse of alcohol at an early age also increase the risk for lifelong dependence on alcohol.

Although data on substance abuse, including alcohol, is difficult to assess and is often underestimated through self-reporting, data collected by appropriate surveillance methods can be found through the National Household Survey on Drug Abuse, conducted by the U.S. Substance Abuse and Mental Health Services Administration. One measure of alcohol abuse is an estimate of binge drinking, which is defined as having five or more drinks on the same occasion at least one day in the past 30 days. As can be seen in Figure 1, Oklahoma's estimates for binge drinking in all age groups are slightly lower than national estimates. Note the high frequency among those of college age.

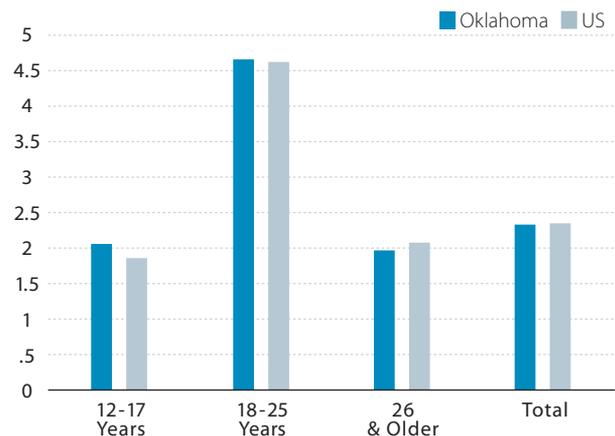
However, when asked about alcohol *dependence*, a different picture emerges for Oklahoma. For those in the younger age groups of 12-17 years and 18-25 years, slightly higher percentages reported dependence on alcohol compared to U.S. averages. This is particularly disturbing because these individuals will be at much greater risk for continued alcohol abuse throughout their lifespan.

FIG 1 Percentages Reporting Past Month Binge Alcohol Use



(SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1999 & 2000)

FIG 2 Percentages Reporting Past Year Alcohol Dependence



(SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1999 & 2000)

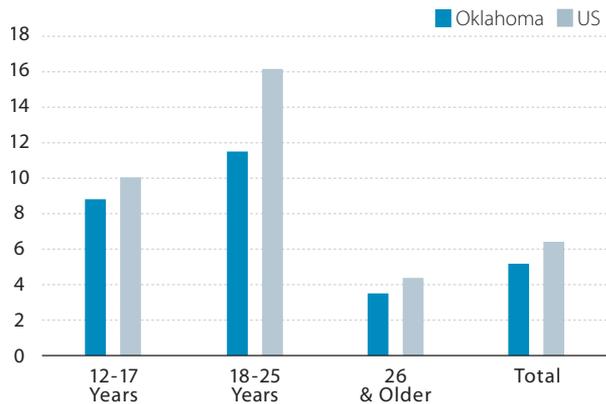
Similar patterns across age groups are seen with illicit drug use, including the use of marijuana, methamphetamine, cocaine and crack, heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic drug used nonmedically. Although, as seen in Figure 3, the overall percentages of illicit drug use among all age groups in Oklahoma are lower than U.S. averages.

However, when asked about illicit drug dependence or abuse, once again the percentages for Oklahoma are near or above U.S. averages (Figure 4).

As has been documented in previous *State of the State's Health Reports*, tobacco use and nicotine addiction continue to plague Oklahoma. Although a legal substance, nicotine has been shown to be as addictive as many illegal drugs, including heroin. Indeed, brain-imaging studies demonstrate that similar areas of the brain are involved regardless of the addiction.

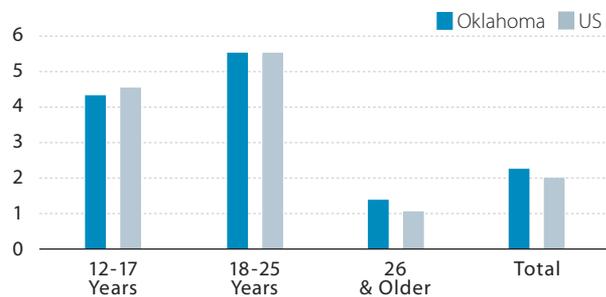
We still have much work to do in the area of tobacco use prevention. Figure 5 shows current cigarette smoking among adults ages 18 and over, with the most recent data available indicating an upward trend in cigarette smoking. In addition, tobacco industry marketing and promotional expenditures in Oklahoma have increased dramatically. Tobacco companies now spend \$136 million in Oklahoma — or an average of more than \$370,000 every day according to the Federal Trade Commission (FTC). With these kinds of resources, the tobacco industry outspends tobacco prevention efforts by over 40 to 1. The good news is that even with very limited funds, decreases in tobacco use among Oklahoma's youth are beginning to be realized as indicated in Figure 6. Targeted, evidence-based prevention efforts work, and investments in prevention make a difference!

FIG 3 Percentages Reporting Past Month Use of Any Illicit Drug



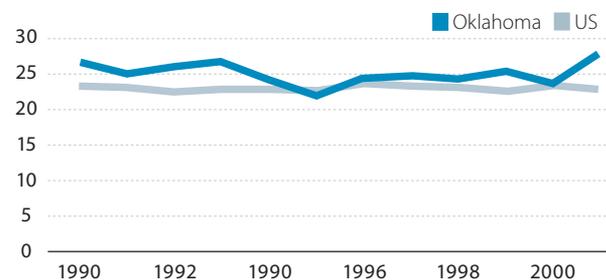
(SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1999 & 2000)

FIG 4 Percentages Reporting Past Year Any Illicit Drug Dependence or Abuse



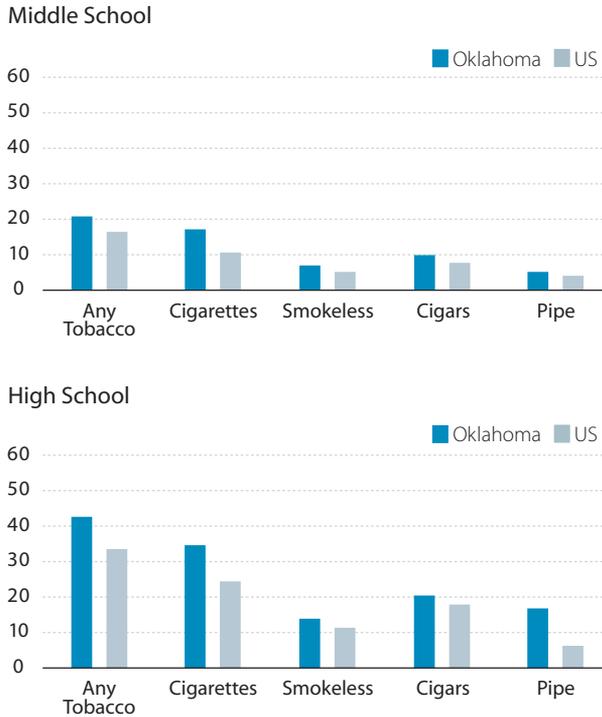
(SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1999 & 2000)

FIG 5 Current Smokers, 1991-2001



(CDC, BRFSS)

FIG 6 Current Tobacco Use by Product and School Level

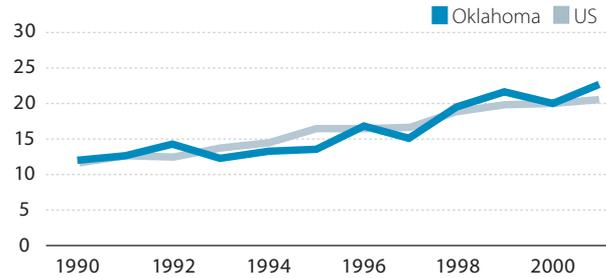


(2002 Oklahoma Youth Tobacco Survey, OSDH)

### Calorie Addiction/Obesity

The rising trend in obesity across the United States has garnered much media attention recently. Of particular concern is the increase in obesity among youth, and therefore, the subsequent increase in rates of Type 2 diabetes, formerly called adult onset diabetes. Previously uncommon in children, Type 2 diabetes is now considered an epidemic in younger age groups (Diabetes Care, Vol. 23, No. 3, March 2000). Given current trends, a recent study predicts that one of three children born after 2000 will develop diabetes during their lifetime. Unfortunately, Oklahoma is mirroring the upward trend in obesity with the nation, as shown in Figure 7.

FIG 7 Percent at Risk for Obesity by Body Mass Index, Adults Ages 18 and Older



(CDC, BRFSS)

The reasons for increased obesity in the U.S. are complex. Fifty-five percent of our population is overweight — making us the heaviest nation in the world (Germany is second). At a critical level, overeating becomes an addiction and morbid obesity ensues. For our children and youth, cancellation of recess and physical education in our schools does not help, nor does the easy availability of “super-sized” and high-fat fast foods.

### Depression

As stated previously, depression is a growing problem on a global scale and is predicted to be one of the leading forms of disability in the world by 2020. In the U.S., clinical depression in some form affects more than 19 million each year, including major depressive disorder, manic depression illness (bipolar disease), and dysthymia, which is a milder, longer lasting form of depression (National Mental Health Association, <<http://www.nmha.org/infoctr/factsheets/21.cfm>>, June 2003). The cost of this incidence of depression is enormous. Lost productive time due to depression is estimated to cost U.S. employers \$31 billion annually (JAMA, June 18, 2003, Vol. 289, No. 23, Pp.

3135-3144). Based on these national statistics, it is estimated that more than 230,000 Oklahomans suffer from clinical depression each year, with comparable costs to Oklahoma employers. Unfortunately, study after study demonstrate that the majority of depression is seen in our primary care system — not by mental health professionals — but is often not recognized, especially in our youth and our senior populations.

According to the National Mental Health Association, symptoms of clinical depression include:

- persistent sad, anxious or “empty” mood
- sleeping too much or too little, middle of the night or early morning waking
- reduced appetite and weight loss, or increased appetite and weight gain
- loss of pleasure and interest in activities once enjoyed, including sex
- restlessness, irritability
- persistent physical symptoms that do not respond to treatment (such as chronic pain or digestive disorders)
- difficulty concentrating, remembering or making decisions
- fatigue or loss of energy
- feeling guilty, hopeless or worthless
- thoughts of suicide or death

These symptoms and clinical diagnosis of depression occur among all age groups and ethnicities. Having five or six of the above symptoms strongly suggests depression.

Appropriate treatment for depression is generally very successful. However, fewer than half of those suffering with depression get appropriate care. Without treatment, depression can lead to more serious problems, so proper diagnosis as well as preventive measures are critical.

### **Other Mental Disorders**

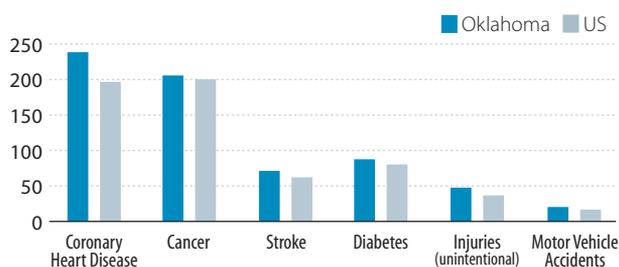
Although not as prevalent as depression, severe anxiety disorders and schizophrenia are much more common than most realize. Alzheimer’s disease is increasing as our population ages. However, at this present time, we do not have adequate population-based data to make comparisons of the burden in Oklahoma compared to the nation at large.

# Consequences

## Deaths: Chronic Conditions, Unintentional Injuries, and Motor Vehicle Crashes

Once considered out of the purview of public health and prevention, mental and addictive disorders now must be considered as significant contributors to population-based disease, disability, and death. This need has been recognized nationally and goals for mental health and substance abuse have been included in the Centers for Disease Control and Pre-vention's *Healthy People 2010* initiative. Addictive behaviors alone account for significant increased risks for several chronic conditions as well as unintentional injuries and motor vehicle crashes. As has been detailed in previous reports, Oklahoma's death rates for heart disease, diabetes, cancer, unintentional injuries, motor vehicle crashes, and stroke are higher than U.S. averages. Although deaths due to chronic disease, unintentional injuries, and motor vehicle crashes are caused by multiple risk factors, again there is mounting evidence that mental and addictive disorders — including nicotine addiction, alcohol use, illicit drug use, and calorie addiction — play a key role.

FIG 8 Overall Deaths (Age-Adjusted Per 100k)

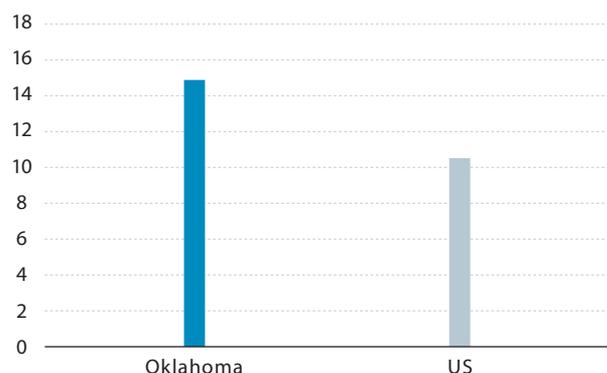


(CDC, Healthy People 2010 Database, February 2003 Edition)

## Suicide

Suicide remains one of the leading causes of death in the United States, especially for young people ages 15-24. Although multiple factors contribute to suicide, at least 90 percent of all people who kill themselves have a mental disorder, a substance abuse disorder, or a combination of disorders (The Oklahoma Academy of State Goals 2002 Report).

FIG 9 Suicide Deaths (Age-Adjusted Per 100k)



(CDC, Healthy People 2010 Database, February 2003 Edition)

Unfortunately, Oklahoma's death rate for suicide exceeds that of the U.S., highlighting again the need for enhanced prevention activities including screening and treatment for depression and abuse of alcohol and illicit drugs.

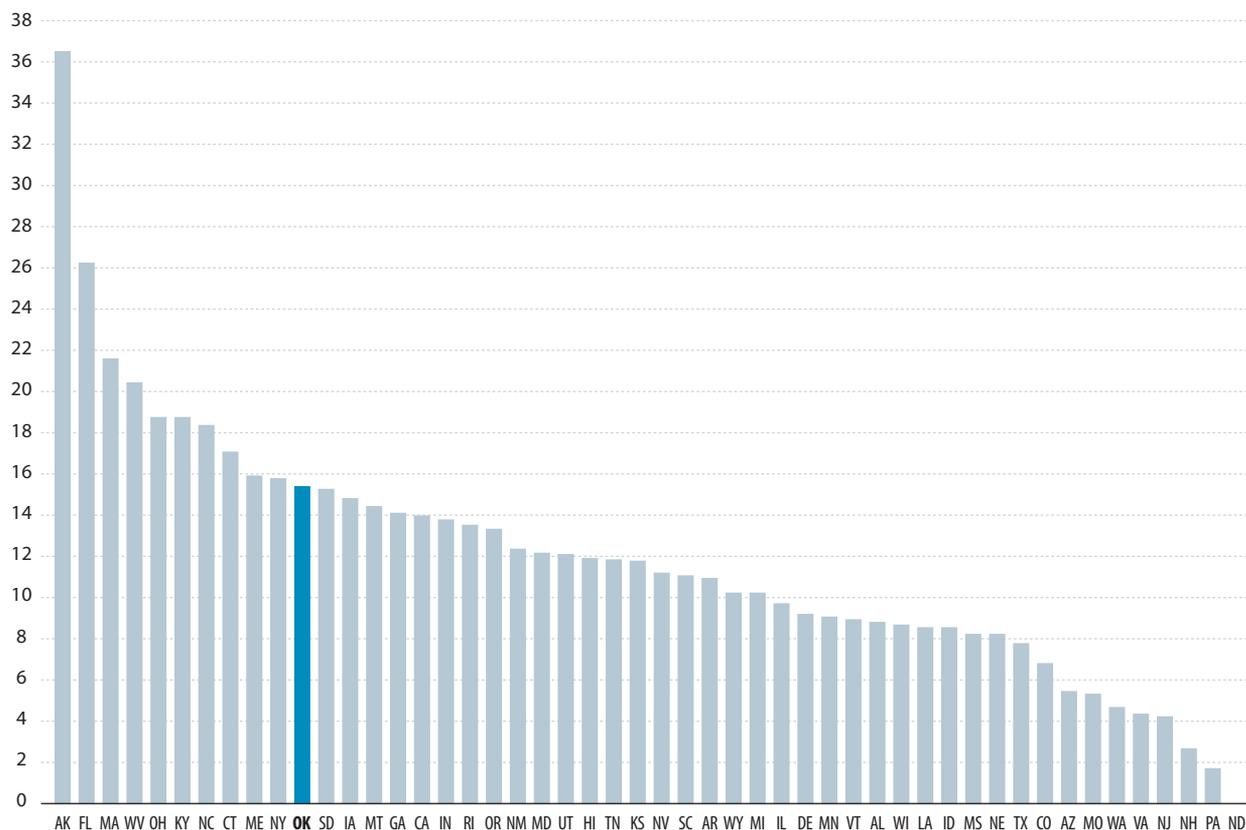
## Child Neglect and Abuse

Another potential and extremely disturbing consequence of alcohol abuse, illicit drug abuse, and depression is child neglect and abuse. As with the other consequences described in this report, child neglect and abuse are not caused by any single issue. Focusing resources on prevention and treat

ment for addictions and mental disorders can reduce the likelihood they will be among the multiple risk factors for child neglect and abuse. Currently available data indicate substance abuse by the child victim's caretaker has been the most frequent type of neglect in Oklahoma, accounting for 22.89 percent of confirmed neglect cases in 2001 (Child Abuse and Neglect Statistics, Fiscal Year 2001. Oklahoma Department of Human Services, Children and Family Services Division, Child Protective Services Program Office, August 2002).

According to the U.S. Administration for Children and Families, nearly three million reports involving five million children were made in the year 2000 nationwide. Of the reports where sufficient evidence was available to prompt an investigation, 879,000 children were found to have been victims of abuse or neglect. Survivors of child abuse and neglect may be at greater risk for problems later in life, including illicit drug use, teen pregnancy, low academic achievement, and incarceration (<<http://www.calib.com/nccanch/prevention/overview/problem.cfm>>).

FIG 10 Children with Substantiated or Indicated Reports of Abuse & Neglect, Year 2000 (Per 1,000 Children in the Population)



In Oklahoma, child abuse and neglect remains a significant problem. In the year 2000, Oklahoma had the 11<sup>th</sup> highest reported rate of children with substantiated or indicated abuse and neglect in the nation (National Data Analysis System, Child Welfare League of America, <<http://ndas.cwla.org>>).

Fortunately, through strong prevention efforts, such as the Children First program administered by the Oklahoma State Department of Health, we are beginning to make an impact and are seeing a decrease in reported cases. As stated by the U.S. Administration for Children and Families, "The best way to prevent child abuse and neglect is to support families and provide parents with the skills and resources they need." (<<http://www.calib.com/nccanch/prevention/overview/prevention.cfm>>).

### **Homelessness**

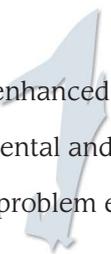
Many of us have probably walked the other way upon seeing a homeless person, or simply looked away. Although it is difficult to know how to respond, homelessness in the United States and Oklahoma is real and is a growing social concern. Of those identified as homeless, fully one-third have serious mental illness and over half suffer from substance abuse (National Mental Health Association, <<http://www.nmha.org/homeless/homelessnessfacts.cfm>>).

Looking at the most recent data available, it was estimated that 1.8 percent of the population in Oklahoma was homeless or at risk for homelessness in 1997, representing nearly 60,000 men, women, and children (Homeless in Oklahoma '97 – Statewide Survey of the Population. Governor's Advisory on the Homeless, Oklahoma Department of Human Services. Office of Support Services Division, Policy Management and Analysis Unit, August 1998). These 60,000 people not only suffer from the lack of a stable shelter, but also often depend on the most expensive forms of health care services such as emergency rooms.

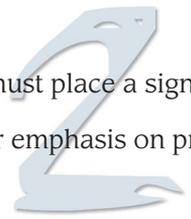
### **Other Consequences**

The presence of mental and addictive disorders — especially if severe, or unrecognized, or poorly treated — increases the likelihood of other problems. Studies have shown that divorce, unemployment, lower productivity, school drop out, unwanted pregnancies, and incarceration all may be consequences of mental and addictive disorders. Collectively, these are very expensive to our society in a variety of ways.

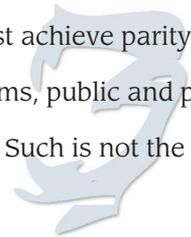
# Recommendations



We must develop enhanced population-based data systems regarding mental and addictive disorders if we are to deal with the problem effectively and efficiently.



We must place a significantly greater emphasis on prevention.



We must achieve parity in our health care systems, public and private, for these disorders. Such is not the case at present.

# Conclusion

If Oklahoma's health status is to improve, dealing effectively with mental and addictive disorders must have a high priority.

# Board of Health



Haskell L. Evans, Jr., RPh, President, has served the health care profession as a registered pharmacist in Lawton for more than 35 years. He is Chief Executive Officer of RPH3, Inc., in Lawton. He has served as president, vice-president, and secretary of the Oklahoma Pharmaceutical Association – District No. 6. Mr. Evans represents the state at large.



Glen E. Diacon, Jr., MD, Vice-President, is a urologist on staff with the Valley View Hospital, Ada. He is certified by the American Board of Urology and is a Fellow in the American College of Surgeons. Dr. Diacon represents Creek, Lincoln, Okfuskee, Seminole, Pottawatomie, Pontotoc, Hughes, Johnston, and Coal counties.



Ann A. Warn, MD, Secretary-Treasurer, is a general ophthalmology eye physician and surgeon practicing in Lawton. She also is a clinical instructor at the University of Oklahoma, Department of Ophthalmology. Dr. Warn represents Blaine, Kingfisher, Canadian, Caddo, Grady, Comanche, Jefferson, Stephens and Cotton counties.



James Lee Anderson, holds a bachelor's degree in Animal Science and a master's degree in Meat Science. He has served on the Oklahoma Restaurant Association Board of Directors for 30 years. Mr. Anderson represents Cimarron, Texas, Beaver, Harper, Woodward, Woods, Major, Alfalfa, Grant, Garfield, Kay, and Noble counties.



Gordon H. Deckert, MD, is retired from the University of Oklahoma Health Sciences Center, where he was a David Ross Boyd Professor in the Department of Psychiatry and Behavioral Sciences. He continues to maintain a clinical private practice and is a consultant to hospitals and physicians groups. Dr. Deckert is also a nationally recognized speaker. He is a past president of the Board of Health. Dr. Deckert represents Logan, Oklahoma, Cleveland, McClain, Garvin, Murray, and Payne counties.



Dan H. Fieker, DO, is Chief Medical Officer and consultant in infectious diseases, and Director of Medical Education at the Tulsa Regional Medical Center. He also serves as clinical professor of medicine at the Oklahoma State University College of Osteopathic Medicine. He is a past president of the Board of Health. Dr. Fieker represents Ottawa, Delaware, Craig, Mayes, Nowata, Rogers, Washington, Tulsa, Pawnee, and Osage counties.



Ron L. Graves, DDS, President, is a board-certified oral and maxillofacial surgeon in private practice in Ardmore. He has served as president of both the Oklahoma Society and Southwest Society of Oral and Maxillofacial Surgeons. He has also served as Chief of Surgery and Chief of Staff at Memorial Hospital of Southern Oklahoma. Dr. Graves represents LeFlore, Latimer, Pittsburg, Atoka, Pushmataha, McCurtain, Choctaw, Bryan, Marshall, Carter, and Love counties.



Jay A. Gregory, MD, is a board-certified surgeon with a general, vascular and thoracic practice in Muskogee. He has served as president for the Oklahoma State Medical Association, Oklahoma Chapter of the American College of Surgeons, Oklahoma Rural Health Association, and the Board of Health. Dr. Gregory represents Adair, Sequoyah, Cherokee, Wagoner, Muskogee, Haskell, McIntosh, and Okmulgee counties.



Ron Osterhout holds bachelor's and master's degrees in civil engineering. He has specialized in domestic and international oil and gas exploration and production. Mr. Osterhout represents Ellis, Dewey, Custer, Roger Mills, Beckham, Washita, Kiowa, Greer, Jackson, Harmon, and Tillman counties.

# Board of Mental Health & Substance Abuse Services



Sue Buck is a graduate of the University of Tulsa, and holds a law degree from the University of Tulsa Law School. Ms. Buck is a member of the Oklahoma Bar Association, and active with the National Association of Consumer Advocates. She is a Board member for SOS for Families, and co-chair for Legal Aid Services of Oklahoma.



Larry McCauley, EdD, is co-founder of the Christian Clinic for Counseling and a full-time faculty member of the Saint Anthony Hospital Family Practice Residency Program. He is a former member and chair of the Oklahoma State Board of Examiners of Psychologists, and active within the OPA having filled numerous service positions.



Bill Crowell, MD, is a board-certified pathologist and Director of the Clinical Lab at Grady Memorial Hospital in Chickasha. Dr. Crowell graduated from the University of Oklahoma, College of Medicine, and completed post-graduate studies in chemical dependency. He is certified internationally as an alcohol and drug counselor.



LaVern W. Philips is President of the Woodward Industrial Foundation, and owner of Philips and Associates. Mr. Philips is a graduate of Northwestern Oklahoma State University. He is Chairperson for the High Plains Economic Development Council and a member of the Woodward Chamber of Commerce.



Beverly Eubanks is the Program Development Manager for Integris Mental Health and Chemical Dependency Services in Oklahoma City. Ms. Eubanks has 21 years of experience as a substance abuse professional and was named as Oklahoma's Alcohol/Drug Professional of the Year in 1998.



Rose Mary Shaw, LCSW, has been Director of the Osage Nation Counseling Center in Pawhuska since 1994, and has developed grant funding for many successful programs including nationally recognized efforts in family violence prevention. She is founder and president of the Oklahoma Native American Domestic Violence Coalition.



Larry Dwight Holden, MD, is the FAPA Board Chair and the Medical Director of Behavioral Healthcare for Hillcrest Healthcare Systems in Tulsa. Dr. Holden graduated Magna Cum Laude from Abilene Christian University, and received his medical training at Southwestern Medical School in Dallas. He is certified by the American Board of Psychiatry and Neurology, and nationally recognized as a leader in behavioral medicine.



Michael H. Smith, PhD, holds a Master of Science in Psychology from Oklahoma State University. Dr. Smith is a licensed professional counselor, and marital and family therapist; business consultant; and longtime employee of the ONEOK Corporation of Tulsa as the Manager of EAP/EEO, Drug Program and Disability Risk.



Dorothy Logan is a graduate of the University of Oklahoma with a degree in Sociology, and is a longtime advocate for behavioral health issues. A resident of Vinita, Ms. Logan was named the town's Outstanding Citizen in 1977. Ms. Logan is active locally in a variety of community service efforts, and community development issues.



Jack Turner is a graduate of the University of Oklahoma, and has ranching and farming interests in the State. In 1997, he was named a member of the Governor's Task Force on Substance Abuse, a group charged with assessing the impact of substance abuse on Oklahoma and making recommendations for improving the service system.



Mary Anne McCaffrey, MD, received her medical degree from the University of Oklahoma, School of Medicine. Dr. McCaffrey is currently a professor of pediatrics, Department of Pediatrics, at the University of Oklahoma Health Sciences Center. She is also the Oklahoma project coordinator for the Women and Girl's Tobacco and Lung Cancer Task Force, ACCP, and has been a delegate to the AMA since 1992.

