



healthy transitions
for oklahoma's youth



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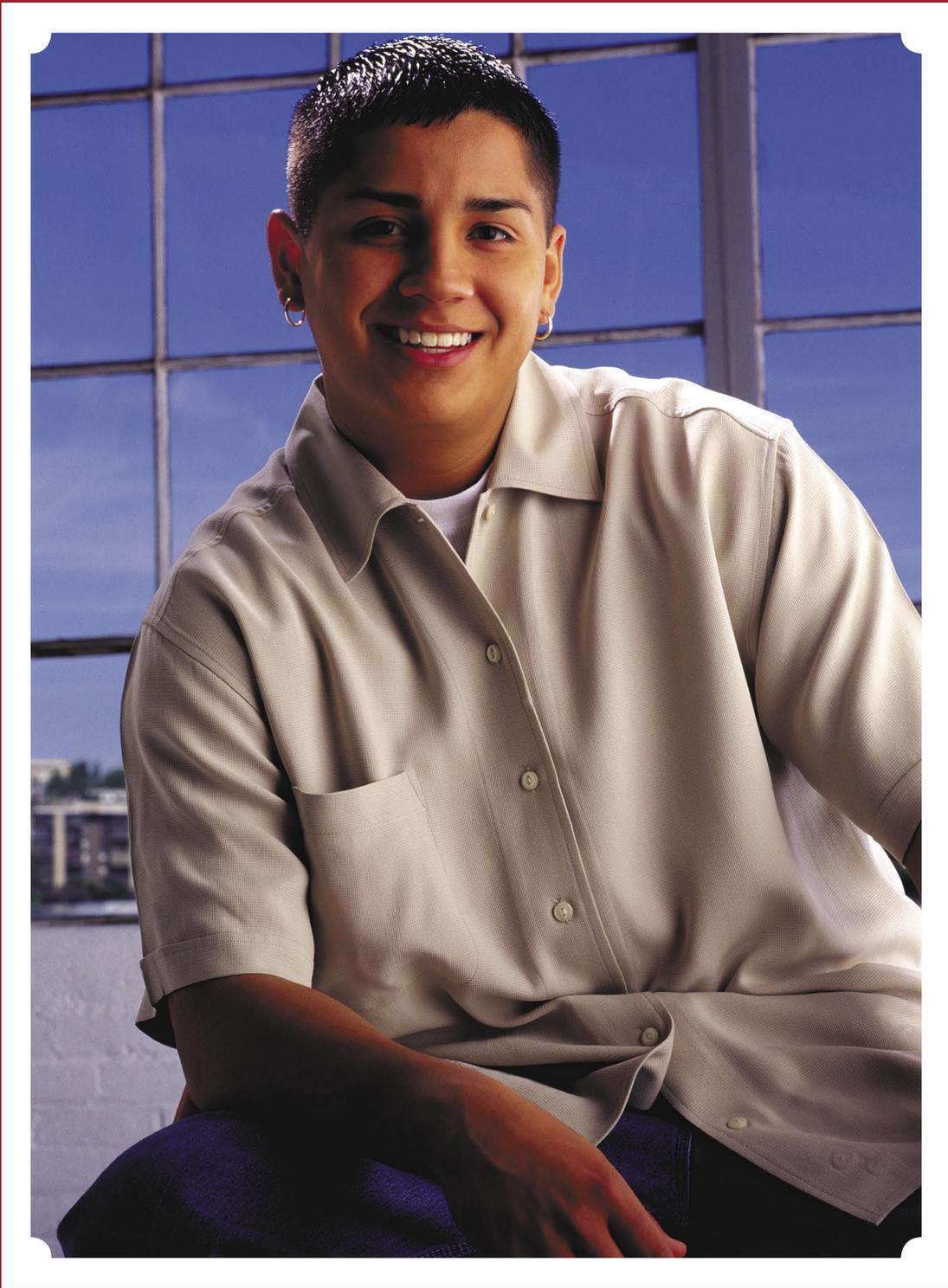
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*...health risk behaviors developed in adolescence
are frequently maintained over a lifetime*

*F*or the past eight 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. The health status of our people by a variety of measures is considerably worse than the nation at large. These trends can be improved if corrective actions are taken.

Two years ago we initiated an annual Interim Report to be released mid-year, a report to focus in greater detail on specific issues that account for our poor health status. Last year in a joint effort with the Board of Mental Health and Substance Abuse Services, we published an Interim Report on Mental and Addictive Disorders. In 2002, we published "The Haves and Have-Nots," which detailed the very significant health disparities among Oklahoma's ethnic minorities. The Oklahoma Legislature responded by creating a Task Force to study these issues.

Oklahoma, for the first time, has participated in the statewide Youth Risk Behavior Survey, developed by the U.S. Centers for Disease Control and Prevention (CDC). This tool has allowed us to take the pulse on the state of our adolescents' health — an important step — since we know that health risk behaviors contribute to leading causes of death, leading causes of disability, major social problems, and over time, increased health care costs.

Thus, the focus of our 2004 Interim Report is those health risk behaviors that typically develop in adolescence and frequently are maintained over a lifetime. In this report, Oklahoma data will be compared with national data, some consequences will be reviewed, and possible interventions suggested.





*... it's imperative we address adolescent risk behaviors
while our youth are the most amenable to change*



Adolescence is one of the most rapid and complex transitions in the human life span, a time of accelerated growth and physical change second only to infancy. It is a time of self-discovery, emerging independence, and psychological maturation.¹ Health behaviors adopted during this formative phase can shape an individual's future health status, life expectancy, and quality of life. Collectively, health behaviors can even shape the future economic development of our state.

Adolescence, unfortunately, is often an age group that finds itself overshadowed by the important health needs of young children and the increasing chronic health conditions of adults. The purpose of this report is to highlight the health issues of this population and illustrate the importance of both risk and protective factors associated with these issues.

In 2003, the Oklahoma State Department of Health took part in a national study of Youth Risk Behaviors in collaboration with the Oklahoma State Department of Education and CDC. The study used the Youth Risk Behavior Survey (YRBS) to measure the prevalence of various self-reported risk-taking behaviors among high-school age adolescents.

The behaviors measured by this instrument include the following: behaviors that result in unintentional and intentional injuries, tobacco use, alcohol and other drug use, sexual behaviors that result in HIV infection, other sexually transmitted diseases (STDs), and unintended pregnancies, dietary behaviors, and physical activity.

In Oklahoma, among people between the ages of 5 and 24 years, over 70 percent of all deaths are due to only four causes: motor vehicle crashes, other unintentional injuries, homicide and suicide. Among adults over age 25, over two-thirds of all deaths are due to only two causes: cardiovascular disease and cancer. The health risk behaviors that contribute to the leading causes of disease and death for adolescents and those that affect the health of adults are usually established during their adolescent years. Thus, it is imperative that we address those risk behaviors while they are the most amenable to change. The most cost effective and efficient way to reduce the incidence of cardiovascular disease and cancer in adults is to prevent their associated risk behaviors in adolescence.

To accomplish this, we must first know where we stand. What are Oklahoma's most prevalent risk behaviors? How does our state compare with the rest of the nation? What is the most efficient and effective course of action?

Fig 1 Percent of Males Not Wearing a Seat Belt as a Passenger

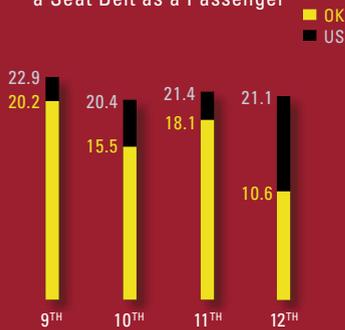


Fig 2 Percent Who Have Driven a Car While Using Alcohol

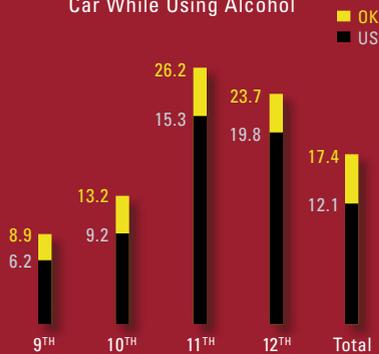
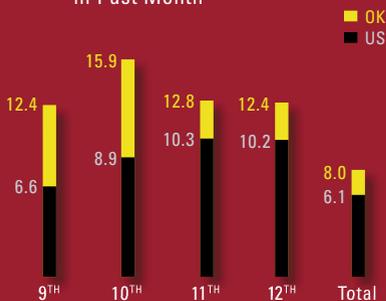


Fig 3 Percent of Males Carrying a Weapon on School Property in Past Month



Motor Vehicle Injuries

Unintentional injuries caused by motor vehicle crashes are by far the leading cause of death for adolescents in Oklahoma. Over the last decade, the state has averaged about 97 motor vehicle-related deaths per year among those between the ages of 15 and 19. The proportion of adolescents reporting rarely or never wearing a seat belt as a passenger is actually lower than the national average. In fact, for males, the proportion not wearing seatbelts decreased from 9th to 12th grade (Figure 1) – good news.

On the negative side, roughly one-third of adolescents report riding in a car with someone who had been drinking, and Oklahoma is nearly 45 percent higher than the nation in the percentage of adolescents who have driven when using alcohol (Figure 2).

Weapons / Violence

The number of Oklahoma adolescent males who carried weapons (knives, guns or clubs) within a month before the survey was almost twice as prevalent as the nation as a whole. While some of this may be accounted for by outdoor activities such as hunting or fishing, Oklahoma males are 34 percent more likely than their national counterparts to carry these weapons on school property (Figure 3).

When asked if they have been threatened at least once during the past year on school property, females were near the national average while males were slightly lower. Both Oklahoma males and females were less likely to report having been in a physical fight in the past year – including instances on school property.

When asked if a boyfriend or girlfriend has ever physically hurt them on purpose, both males and females are slightly higher than the national average at 9.5 percent combined. When looking at forced sexual intercourse, Oklahoma is slightly lower than the national average, with females indicating a higher prevalence (Figure 4).

Mental Health

Suicide alternates with homicide as the second leading cause of death for adolescents between the ages of 15 and 19. In the year 2002, 86 individuals between the ages of 10 and 24 died by suicide, with an additional 627 attempts recorded by hospitals across the state. The YRBS finds that 15.4 percent of Oklahoma high school students reported having seriously considered attempting suicide, 13.3 percent had made a suicide plan and 7 percent had actually attempted in the past year (Figure 5).

These are frightening numbers. Seven out of every 100 high school students in this state tried to end their lives during a year's time! Suicidal behavior has a strong association with mental illness. At least 80 percent of suicides have a preceding diagnosable brain dysfunction disorder.² As indicated in the YRBS, over 25 percent of high school students reported feeling so sad or hopeless almost everyday for at least two weeks in a row that they ceased involvement in some of their usual activities. This suggests depression, which is a significant risk factor for suicide.

Tobacco Use

According to the Oklahoma Youth Tobacco Survey, a survey process similar to YRBS, 24 percent of students have used cigarettes within the last month, and 10 percent have used smokeless tobacco. Males have a higher usage, with 38.4 percent having used either cigarettes or smokeless tobacco, compared with 25.1 percent of females. This difference was much more pronounced with smokeless tobacco, with the YRBS indicating that 23 percent of males had used during the past month compared with only 1.7 percent of females (Figure 6). The rates among males remain consistent throughout all four grades of high school.

Nicotine addiction continues to be a leading factor in the overall health status of Oklahoma. The most effective way to address this is to prevent the onset in adolescents...the age at which most current adult smokers began. Nationally, when the addiction begins

Fig 4 Percent Reporting Forced Sexual Intercourse

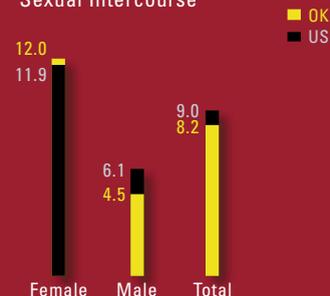


Fig 5 Percent Who Have Considered, Planned, or Attempted Suicide

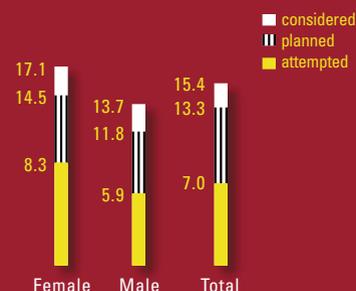


Fig 6 Percent Using Smokeless Tobacco in Past Month



at 12 or 13 years of age and continues throughout a lifetime, life expectancy is reduced by 12.5 years.

Substance Abuse

Almost half (47.8 percent) of Oklahoma adolescents report having had at least one drink of alcohol in the past 30 days, and over one-fourth (26.7 percent) had their first drink of alcohol before age 13. When asked about binge drinking, or having five or more drinks of alcohol within a two-hour timeframe, almost 40 percent of males indicated they had done this in the past month! Females, while lower at 28.3 percent, were still above their national counterparts. Together, these are above the U.S. average (Figure 7).

For marijuana use, Oklahoma was slightly below the national average when looking at current use (at least once during the last 30 days). However, when broken down by grade level, there are instances where Oklahoma is higher (Figure 8).

When asked if they have been offered, sold or given illegal drugs on school property, 22.2 percent of Oklahoma adolescents indicated that they had. This is less than the national average of 28.7 percent (Figure 9).

Sexual Behaviors

Half of Oklahoma high school age adolescents indicate that they have had sexual intercourse, higher than the national average (Figure 10).

Additionally, 15.7 percent of Oklahoma adolescents indicate that they have had sex with at least four different people, above the national average of 14.4 percent (Figure 11).

Among those who are sexually active, 33.1 percent of Oklahoma adolescents report using a condom during last intercourse, markedly less than the national average of 63 percent. These figures all have significant implications for both teenage pregnancy and the spread of sexually transmitted diseases, including HIV.

Fig 7 Percent Drinking Five or More Alcoholic Drinks on One or More Days in Past Month

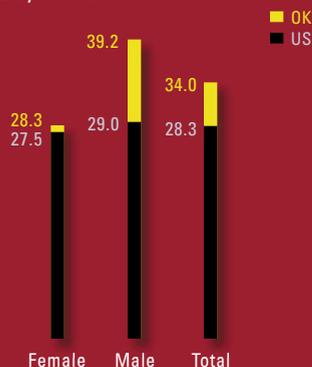


Fig 8 Percent Using Marijuana One or More Times in Past Month

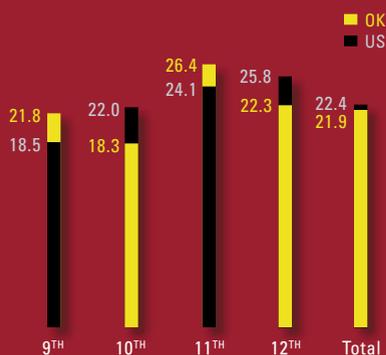
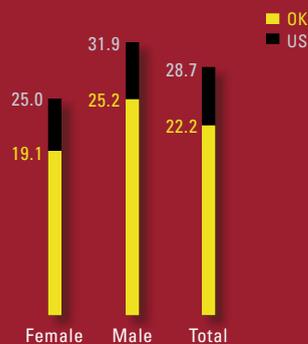


Fig 9 Percent Offered, Sold, or Given Illegal Drugs on School Property



In 2003, 4,402 cases of chlamydia were reported among 15- to 19-year-olds in this state, along with 1,428 cases of gonorrhea. Babies born to females under the age of 20 in 2002 numbered 7,415, while 2,329 babies were born to mothers younger than 18, and 113 were born to mothers under age 15. Comparing data from 2002 births, Oklahoma has the 8th highest teen birth rate in the nation for females age 15-19, and 64 of Oklahoma's 77 counties have birth rates that are higher than the national average.

The costs and consequences of pregnancy affect adolescents, their children and all segments of our communities:

- Pregnant teens are twice as likely, when compared to all pregnant women, to receive no prenatal care, or care initiated in the third trimester.³
- Oklahoma mothers with recent births who had their first child at 17 or younger are at least ten times more at risk for not finishing high school by age 18 compared to women who have their first child after age 19.⁴
- Nationally, 39 percent of teen fathers receive their high school certification by age 20, compared to 86 percent who postpone parenting.⁵
- Less than four in ten teen mothers who began their families before age 18 ever complete high school.⁶

Children of adolescent females are also affected by early childbearing.⁷

- Daughters of adolescent females are 83 percent more likely themselves to become mothers before age 18.
- Sons of adolescent females are 2.7 times more likely to be incarcerated sometime during their lifetime than sons of mothers who delayed childbearing until their early twenties.
- Children of adolescent females are more than twice as likely to be the victims of abuse and neglect than are the offspring of 20- to 21-year-old mothers.

Fig 10 Percent Who Have Had Sexual Intercourse

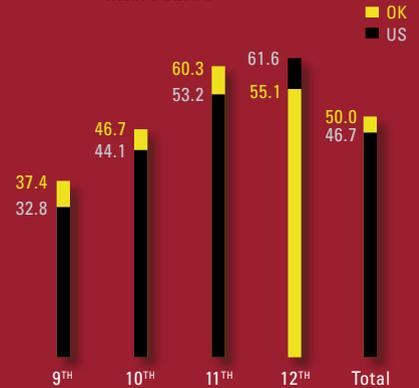


Fig 11 Percent Who Have Had Sex With Four or More People



Teen childbearing also places a significant burden on the state from a financial standpoint. Not only do many teen parents depend on public assistance, but they are less likely to obtain high-paying employment later on, which reduces the state’s overall tax base. So, we see a double hit on the state’s economy.

Adults, including parents and teachers, considerably underestimate adolescent sexual activity and the adverse consequences of that activity.

Overweight / Physical Activity and Nutrition

Roughly one-third of Oklahoma YRBS respondents described themselves as slightly or very overweight (25.3 percent of males and 36.6 percent of females). Approximately 44 percent indicated that they are currently trying to lose weight, but there is a wide gap between males (29.4 percent) and females (60.1 percent). This difference may be reflective of higher social pressure for females to strive for what can often be an unrealistic and unhealthy body image. So, while encouraging adolescents to be aware of the need for a healthy weight, care must be taken to ensure that it is achieved in an appropriate manner.

To illustrate, 42.6 percent of students ate less food, fewer calories or foods low in fat for the purpose of weight control, and 59.1 percent exercised during the previous 20 days specifically for this same reason. In contrast, 13.1 percent of students went without eating for at least 24 hours to lose weight or to keep from gaining weight, and 4.7 percent vomited or took laxatives for this same purpose.

The YRBS asks students for their height and weight, from which a Body Mass Index (BMI) is calculated. Based on this information, 14.2 percent of Oklahoma high-school age adolescents are at risk of becoming overweight (12.5 percent for males and 16 percent for females) (Figure 12). Additionally, 11.1 percent of students are currently overweight (15.9 percent of males and 6.1 percent of females) (Figure 13).

Fig 12 Percent at Risk for Becoming Overweight



Fig 13 Percent Currently Overweight

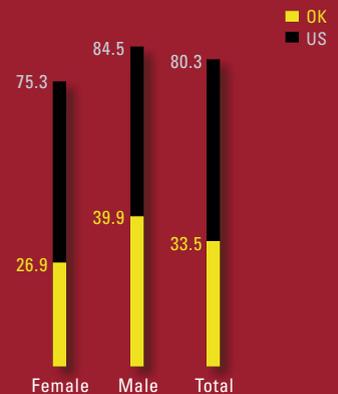


The good news is that both of these indicators are slightly below the national average. Please note females are more likely to consider themselves overweight, while males had over twice their reported prevalence.

When looking at the proportion of adolescents participating in vigorous physical activity, Oklahoma is slightly above the national average at 64.3 percent compared to 62.6 percent nationally. Oklahoma adolescents are slightly less likely to have watched three or more hours of television per day than the nation (36.7 percent and 38.2 percent, respectively). One shortfall for Oklahoma has to do with physical education in school. Only 37.3 percent of students reported being enrolled in a physical education class, compared with 55.7 percent nationally. Only 33.5 percent of students enrolled in physical education actually spent more than 20 minutes exercising or playing sports, compared with 80.3 percent nationally (Figure 14).

Obesity in adolescents is generally caused by lack of physical activity and unhealthy eating habits, combined with genetics and overall lifestyle.⁸ Risk factors for heart disease, such as high cholesterol and high blood pressure, occur with increased frequency in overweight children and adolescents compared to children with a healthy weight. Type II diabetes, once considered an adult disease, has increased in prevalence among adolescents and even in children. Indeed, it has become an epidemic. Overweight adolescents have a 70 percent chance of becoming overweight or obese adults. The risk of heart disease, type II diabetes, high blood pressure and some cancers are very real risks associated with obesity. The most immediate consequence of being overweight for an adolescent is social discrimination, associated with poor self-esteem and depression.⁹

Fig 14 Percent Spending More Than 20 Minutes Exercising in PE Class





...we must avoid giving adolescents the impression that they are problems to be fixed, rather than resources to be developed



The tendency is to focus on the negative health indicators or behaviors involving adolescents, e.g., to focus on the fact that 34 percent of adolescents used tobacco during a month's time, rather than the fact that 66 percent did not. We must begin to address adolescent health as a priority, but at the same time, we must avoid painting an unduly negative picture. In particular, we must avoid giving adolescents the impression that they are seen only as problems to be fixed rather than as resources to be developed. Furthermore, we cannot overlook the role and responsibility that adults have in this process as parents, caregivers, mentors, ministers, teachers, coaches and neighbors.

Adolescent behaviors serve not only as a current indicator of the health of our communities, but also as a predictor of the future health of our state. If we are to improve the relatively poor state of our state's health, we must attend to and support our adolescents. This is an opportunity we cannot squander. We must identify the strengths and talents of youth in our communities. We must use those strengths to actively counteract the negative influences that are out there. Do you know any adolescents who are good at public speaking? Written expression? Creative problem solving? They will be of invaluable assistance when presenting issues and proposals to local policy makers or community coalitions. Both youth and adults begin to take a shared and productive responsibility when this happens.



*...adults must model positive health behaviors for adolescents
and take the time to build positive relationships with them*

P

revious *State of the State's Health* reports have documented the compound problem of skyrocketing health care costs and a declining health status. Again, reducing the prevalence of health risk behaviors in adolescence is one way we can significantly begin to turn this trend around. This in turn will reduce the burden on the health care system, both by a reduction in expenditures and by an increase in productive adult years, thereby improving our economy. If we want our future workforce to stay competitive with the rest of the nation, and the rest of the world, we must assure that children and adolescents are able to get the most from their educational opportunities by reducing the significant hindrance to learning that these health risks impose. Schools, though often linked with discussions of youth risk behaviors, are only one player in the process of improving youth risk behaviors. Indeed, the majority of the risk behaviors mentioned in this report do not occur at school. Schools cannot, and should not, be our only venue for health promotion efforts.

Finally, we must acknowledge that these health risk behaviors, and the underlying influences associated with them, are interconnected. If we are to adequately address teen pregnancy, substance abuse and violent behaviors, the shared issues of coping skills and positive peer influence must be improved. We cannot afford, either financially or practically, to tackle these one by one in a compartmentalized fashion. The individual risk behaviors we measure are but indicators of the shared root problems we want to solve.





The Oklahoma State Board of Health recommends:

- For grades K-8, establish a minimum weekly statewide fitness education requirement: 150 minutes of physical education and 60 minutes of health-nutrition education. (In this, we support the Fit Kids Coalition proposal.) In addition, incorporate physical activity alternatives for students in grades 9-12 who are not involved in competitive sports.
- Support enforcement of our seat belt laws.
- Support reduction of illegal sales of alcohol and tobacco to children and adolescents.
- Pass the state vote increasing the tax on tobacco.
- Implement the recommendations of the Systems of Care Initiative of the Oklahoma Department of Mental Health and Substance Abuse Services to improve access and coordination of mental health care for adolescents.
- Improve the nutritional quality of food items sold in vending machines located in schools.
- Support community-based teen pregnancy prevention efforts, and be active as parents in the education of our children on issues such as sexuality and substance abuse.
- Link local Turning Point partnerships with the local Healthy and Fit School Advisory Committees created by the passage of SB 1627 to give schools a wide community base from which to begin to address these various health issues through local community development efforts.
- Involve youth in the planning and implementation of all health promotion efforts. They must buy-in with the activities or prevention programs being developed, or participation and response can be adversely affected. Remember, they are a resource to be tapped, not a problem to be fixed.
- Adults must model positive health behaviors for adolescents and take the time to build positive relationships with the young people around us. The building of youth assets is perhaps the most important-to-implement strategy we can take — but it takes all of us.

The Healthy People 2010 Critical Health Objectives for Adolescents:

- Reduce the death rate of adolescents and young adults.
- Reduce deaths caused by motor vehicle crashes.
- Reduce deaths and injuries caused by alcohol and drug related motor vehicle crashes.
- Increase use of seat belts.
- Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol.
- Reduce the suicide rate.
- Reduce the rate of suicide attempts by adolescents that required medical attention.
- Reduce the homicide rate.
- Reduce physical fighting among adolescents.
- Reduce weapon carrying by adolescents on school property.
- Reduce the proportion of adolescents engaging in binge drinking of alcoholic beverages.
- Reduce the proportion of children and adolescents with disabilities who are reported to be sad, unhappy or depressed.
- Increase the proportion of children with mental health problems who receive treatment.
- Reduce pregnancies among adolescent females.
- Reduce the number of new HIV diagnoses among adolescents and adults.
- Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.
- Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.
- Reduce past-month use of illicit substances.
- Reduce tobacco use by adolescents.
- Reduce the proportion of children and adolescents who are overweight or obese.
- Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness three or more days per week for 20 or more minutes per occasion.





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