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The 8% Solution

The prevalence of serious juvenile delinquency could be reduced significantly by identifying and treating the small percentage of juveniles who are at risk of becoming chronic offenders when they first come into contact with the juvenile justice system. This Fact Sheet describes the California 8% Solution study and the 8% Early Intervention Program, which assesses the needs of and provides treatment services to these youth.

The 8% Solution: Preventing Serious, Repeat Juvenile Crime[1] describes efforts begun by the Orange County (CA) Probation Department in the latter part of the 1980s to "make a dent in the long-term crime problem" by focusing its resources in the most effective way. The Probation Department's research staff tracked two groups of first-time offenders for 3 years and found that a small percentage (8 percent) of the juveniles were arrested repeatedly (a minimum of four times within a 3-year period) and were responsible for 55 percent of repeat cases.

The characteristics of this group of repeat offenders (referred to as "the 8% problem") were dramatically different from those who were arrested only once. These differences did not develop after exposure to the juvenile justice system, as some might expect; they were evident at first arrest and referral to juvenile court, and they worsened if nothing was done to alleviate the youth's problems. Unfortunately, in wanting to "give a break" to first-time offenders, the juvenile justice system often pays scant attention to those at greatest risk of becoming chronic offenders until they have established a record of repeated serious offending.

The good news is that most of the small group of potentially serious, chronic offenders can be identified reliably at first contact with the juvenile justice system. The "8%" offenders enter the system with a complex set of problems or risk factors, which the study identified as (1) involvement in crime at an early age and (2) a multiproblem profile including significant family problems (abuse, neglect, criminal family members, and/or a lack of parental supervision and control), problems at school (truancy, failing more than one course, or a recent suspension or expulsion), drug and alcohol abuse, and behaviors such as gang involvement, running away, and stealing.

[1] M. Schumacher and G.A. Kurz (Thousand Oaks, CA: Sage Publications, Inc.), 1999. Available from www.sagepub.com.

A Demonstration Program

Armed with the study's results, Orange County created its 8% Early Intervention Program to serve first-time offenders who were no older than 15½ and who exhibited at least three of the four risk factors in the multiproblem profile. The program focuses on high-risk youth and their entire families. Its goals are to increase structure, supervision, and support for families; make potential "8-percenters" accountable; ensure that youth and families understand the importance of school; and promote prosocial values, behavior, and relationships. The program also works to develop intervention strategies and services for youth in the community and to instill a strong commitment to teamwork by all partners, including representatives from other youth-serving agencies.

The program's pilot phase began in July 1994 with youth from Anaheim and Buena Park in northern Orange County but offered only limited assistance from outside agencies. Since June 1998, full services for youth and their families, augmented by State funds through California's legislatively established Repeat Offender Prevention Program (ROPP), have been provided through a collaborative team of public and private agencies. These services were provided first at the North Orange County Youth and Family Resource Center in Anaheim. By early 1999, four additional Youth and Family Resource Centers had opened in Orange County: a second site adjacent to the first one in Anaheim but tailored for older youth under the State-funded 8% Challenge Program; a central site in Santa Ana; a western site in Westminster; and a southern site in Aliso Viejo.

Services

Probation officers identify cases that are appropriate for the program and refer them to the Youth and Family Resource Centers. At the centers, agencies collaborate as a team to assess a youth's needs and devise a case planning strategy. Together, the partners provide:

- An onsite school for students in junior and senior high school.
- Transportation to and from home.
- Counseling for drug and alcohol abuse.

- Mental health evaluations and followup services.
- Health screenings (northern center only) and health education.
- Employment preparation and job placement services.
- Afternoon programs, including recreation, life-skills classes, study hall, and community service projects.
- At-home, intensive family counseling for families that can benefit from it.
- Intermittent evening classes for the whole family, such as parenting classes.
- Saturday community service activities twice a month.

Evaluation

A 5-year evaluation of the demonstration program, funded through ROPP, is under way. Some preliminary conclusions have been reached, including the following:

- The number of chronic juvenile recidivists can be reduced through a coordinated program of aggressive early intervention and treatment of high-risk youth and families.
- Significant risk factors are often overlooked at key points in the juvenile justice system because of a lack of critical information.
- Cooperative, concerted efforts to empower families can pay major dividends.
- Even a modest reduction in recidivism rates for the 8% problem group could result in major, long-term savings.

Final evaluation results for Orange County and the statewide ROPP project are expected to be available in fall 2002.

Conclusion

There will never be sufficient resources to deflect all juvenile delinquents from a pattern of offending. It is essential, instead, to focus intervention efforts where the need and the potential benefits are the greatest. Such a concentration of efforts may lead to a solution of the 8% problem and have a meaningful impact on community safety and on the future of many youth who might otherwise persist in lives of crime and violence.

For Further Information

More detailed statistical information on the 8% Solution can be found on the Orange County Probation Department Web site at www.oc.ca.gov/probation.

The Office of Juvenile Justice and Delinquency Prevention is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the National Institute of Justice, and the Office for Victims of Crime.

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8 PERCENT SOLUTION

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- Program Assessment & Service Plan Forms
- Orange County's Model Continuum Of Juvenile Justice Services
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RESOURCES

- Baker-to-Vegas Challenge Cup Relay
- California Department of Corrections and Rehabilitation
- Chief Probation Officers of California
- Detention Ministry/ Restorative Justice
- Grand Jury Orange County
- OC Department of Education
- Orange County Re-Entry Partnerships
- Pacific Youth Correctional Ministries
- Probation Community Action Association
- The Transition from Jail to Community - OC
- Voting Rights for Californians with Criminal Convictions or Detained in Jail or Prison

POPULAR

8 Percent Problem Study Findings

Exploratory Research Findings and Implications for Problem Solutions

Executive Summary

Note: This Executive Summary was prepared in March 1994 by Gwen A. Kurz and Louis E. Moore of the Orange County Probation Department to facilitate the distribution of the results of the Probation Department's studies on chronic juvenile offender recidivism to criminal justice professionals and other interested parties. Notations were added by Ms. Kurz in March 1999 to reflect changes resulting from the continuing research effort.

In the 1980s, Orange County, California, experienced a rise in juvenile crime along with a rise in population, increased urbanization, and other changes. Yet the resources available to county and city governments did not keep pace, and sometimes shrank.

As a result, the Orange County Probation Department began focusing its efforts on the most serious offenders, with little left to devote to early intervention. But given limited resources, was this the best approach?

As part of Strategic Planning efforts for the 1990s, the department's management directed its in-house research staff to undertake studies to answer the question, "How well is the Probation Department doing with the youthful offenders of today?" As a by-product of these studies, a group of chronic juvenile re-offenders was identified as the "8% problem."

This report summarizes the significant findings of those exploratory studies, conducted in Orange County between 1987 and 1993.

The Probation Department research staff had previously conducted research on risk factors with juvenile offenders and was knowledgeable of other studies in the field. This experience and knowledge provided direction to the formal study effort, which ultimately involved three phases of exploration.

In Study Phase I, two sets of data were examined, each comprising more than 3,000 juvenile offenders who entered Orange County's juvenile justice system for the first time during the first six months of 1985 and 1987, respectively. Each cohort of minors was tracked for three years to determine the overall volume of offenses committed and to examine differences between those minors who commit just one offense versus those who become low rate or chronic re-offenders.

During Study Phase II, a sample of the 1987 study cohort was drawn to further examine the differences between three subgroups:

Non-recidivists: Those minors with one referral to the Probation Department for a criminal offense during the three-year study period.

Low-rate recidivists: Those minors with two or three criminal justice referrals during the three-year study period.

Chronic recidivists: Those minors with four or more referrals during the three-year study period.

For the 1987 study subsamples, researchers gathered additional profile data and extended the tracking period for subsequent offenses to a total of six years.

Study Phase II resulted in a recommended target population for the development and testing of early intervention strategies to reduce chronic juvenile recidivism in Orange County. It also provided data indicative of the costs associated with the "8% problem" group.

In Study Phase III, the specific factors which were found to best predict chronic juvenile offending during Study Phase II were tested with a second, much larger data set. This led to specific recommendations for a pilot intervention project and follow-on study effort.

Overall, these study results are hopeful, concluding that through improved information-sharing and risk assessment techniques, a larger proportion of high-risk minors can be turned around before they become part of the "8% problem." There is also ample evidence that even a small reduction in Orange County's rate of chronic juvenile recidivism can pay major dividends to individual families and the safety of our communities for years to come.

The following provides a summary of the major findings of each study phase and the study conclusions. Also included is a brief description of the "8% problem" solution - the pilot intervention project that is being designed at the Orange County Probation Department.

Study Phase I: "8% Problem" Identification

The tracking of two cohorts of more than 3,000 first-time juvenile offenders revealed that, in the vast majority of cases, the juvenile justice system in Orange County was successful in deterring repeat offenses. Some aspect of each minor's contact with police, probation or the courts apparently had a positive influence on their lives.

On the other end of the spectrum, a small, troublesome group of frequent re-offenders was identified.

More specifically, the study showed that:

1. At least two-thirds of the minors in both studies (71% in the second study) did not have a new probation referral during the initial three-year study period. Referrals to the Probation Department consist of an application for a petition to be filed in Juvenile Court, alleging a criminal offense.
2. Some offenders (21% in the second study) went on to commit one or two additional offenses during the study period.
3. A small percentage of minors (10% in the first study and 8% in the second) committed at least three additional offenses during the study period. These youths accounted for more than half of the repeat offenses committed by each study group.

After the second recidivism analysis was completed on the 1987 cohort, the group of minors with four or more applications for petition during the three-year tracking period began being called the "8% problem" (see Table 1).

Study Phases II and III: "8% Problem" Definition

The next two study phases were aimed at better understanding the characteristics and profile of the "8%" repeat offenders and the costs associated with their handling.

The study effort focused exclusively on the 1987 study group, reexamining the full cohort of 3,164 minors and more in-depth analysis of representative subsamples.

A major conclusion from Study Phase II was that a highly significant proportion of the chronic juvenile offenders in Orange County could be accurately identified and targeted for early intervention at the time of their first-ever system referral. This was done by combining an Age factor (15 or younger at the initial contact) with the presence of a Multi-Problem factor (see Table 2).

Below are the key findings from Study Phases II and III:

1. A majority of the chronic recidivist (8%) group was age 15 or younger at the time of their initial case disposition (57% compared with only 23% and 31% of the non- and low-rate recidivist groups, respectively).
2. Nearly half of the minors who became recidivists were made wards of the Court at their initial system referral versus only 22% of non-recidivists.
3. The chronic recidivism rate for first-time wards age 15 or less (32%) was four times as great as that of first-time wards age 16 or older (8%). These findings did not vary based on gender, ethnicity, or referral offense.
4. The chronic recidivist group was found to have significantly more problem areas in their lives, such as drug abuse, dysfunctional families, or failure in school, based on an initial evaluation of six problem variables. These chronic juvenile offenders averaged 3.25 problems each, compared to 1.74 for the low-rate recidivist group and 1.06 for the majority of youths who committed only a single offense. These problem areas were later refined and grouped into the four composite problem factors listed in Table 2.
5. Utilizing the 1987 sub-samples, minors age 15 or less and minors declared wards of the Juvenile Court after their initial offense were also found to have a higher average number of problem factors (see Table 2) than those who were age 16 or older or whose initial cases were dismissed or handled with informal probation. >
6. Based on a six-year follow-up of the1987study sub-samples, chronic juvenile offenders averaged nearly 20 months of incarceration, costing Orange County taxpayers $44,000 apiece in custody costs alone. Because at least 500 new "8% problem" cases are added to Orange County's criminal justice system annually, each new group could potentially cost taxpayers $22 million to incarcerate.

During Study Phases II and III, the researchers also conducted a variety of tests to see how well various factors worked as predictors of youths who would become serious, chronic juvenile offenders.

The previously referenced Multi-Problem profile and Age factors were tested as predictors of chronic recidivism with the study sub-samples from the 1987 cohort. In 70% of the cases, these factors accurately predicted whether a youth would become a chronic juvenile offender. (This test produced 19% false positives and 11% false negatives.) With youths ages 15 and younger, the degree of accuracy rose to 77%, and with older minors it fell to 64%.

In Study Phase III, a similar test was conducted with 905 first-time wards of the court -- the recommended target population and the more serious of the first-time offenders. In 66% of the cases, the recommended factors correctly identified youths as chronic, low rate or non-recidivists. (This test produced 28% false positives and only 6% false negatives.) By correcting problems with variable definitions for the first-time ward data set, the number of false positives can be significantly reduced.

Based on the study results, the authors recommend targeting younger minors with multiple problem profiles as defined in Table 2 for the design of new program strategies aimed at reducing chronic recidivism. Two notes of caution should be considered:

> There is as yet no proof that the recommended strategies (see Study Conclusions) will work better than those currently employed. Therefore, a pilot program is recommended, with a formal program evaluation component.

The initial target population should consist of young, first-time wards of the Court. The Probation Department already has a mandate to take appropriate action to prevent further criminal activity with this population.

Table 1: Orange County Juvenile Justice System Recidivism Analyses

1985 Cohort Study Results

No. of Referrals per minor during 3-year Tracking Period	No. of Minors in each Category	Percent of Total Minors	No. of Referrals For Each Category	No. of Subsequent Referrals	Percent of Subsequent Referrals
1	2,190	66%	2,190	0	0%
2	541	16%	1,082	541	22%
3	248	8%	744	496	20%
4-14	325	10%	1,771	1,446	58%
Total	**3,304**	**100%**	**5,787**	**2,483**	**100%**

1987 Cohort Study Results

No. of Referrals per minor during 3-year Tracking Period	No. of Minors in each Category	Percent of Total Minors	No. of Referrals For Each Category	No. of Subsequent Referrals	Percent of Subsequent Referrals
1	2,234	71%	2,234	0	0%
2	472	15%	944	472	24%
3	205	6%	615	410	21%
4-14	253	8%	1,339	1,086	55%
Total	**3,164**	**100%**	**5,132**	**1,968**	**100%**

Table 2: Recommended Composite Problem Factors

As defined in the 8% study, the "multi-problem factor" constitutes two or more of the problem factors listed below. For each factor, a "yes" on any one sub-measure constitutes a "problem" in that area. **1999 Note:** For the first-time ward population addressed by the 8% Solution, three or more problem factors are required.

1. School Behavior/Performance Factor

This problem factor consists of three individual measures:

Attendance Problems (Truancy or a pattern of "skipping" school in certain classes or at certain times of day).

Behavior Problems (Recent suspensions or expulsion).

Poor Grades (Failing one or more classes). 1999 Note: Factor now defined as failing two or more classes.

2. Family Problem Factor

Four individual measures were aggregated to create this factor, each addressing a different dimension.

Poor Parental Supervision and Control (Parents do not know where the minor goes, what he or she does, or with whom, and have little or no influence in such matters.)

Significant Family Problems (Illness, substance abuse, recent trauma, major financial problems, marital/family discord or other significant stressors.) **1999 Note:** This factor used at Intake only to indicate need for better assessment of family needs or problems subsequent to Intake or court disposition.

Criminal Family Members Exerting a Negative Influence on the Minor

Documented Child Abuse or Neglect (Dependent child status or recent petitions filed on the minor's behalf) **1999 Note:** This factor now includes family violence.

3. Substance Abuse Factor

This includes the use of alcohol or drugs by minors in any way but experimentation.

4. Delinquency Factor

Three measures were included. Each appears associated with a somewhat different criminal pathway, in terms of early onset.

A Stealing Pattern of Behavior

A Runaway Pattern of Behavior

Gang Member or Associate

Study Conclusions

Based on the findings of the entire exploratory research effort, the authors have concluded that:

1. The number of chronic juvenile recidivists in Orange County can be reduced through a coordinated program of aggressive early intervention and treatment of young, high-risk juvenile offenders and their families.
2. A significant proportion of chronic juvenile offenders can be accurately targeted for early intervention the very first time they are referred for juvenile justice system handling. The problems in their lives (from Table 2) are evident before they are influenced by the juvenile justice system or involved in further crimes.

3. Significant risk factors are often overlooked at key points in the processing of youth through Orange County's juvenile justice system due to a lack of critical information. Information-sharing among youth-serving agencies and improved risk assessment techniques hold significant potential for increasing overall system effectiveness.
4. Cooperative, concerted efforts to empower and build the families of high-risk youth can pay major dividends for years to come. More than half of the families of high-risk youth studied for this report had significant problems impeding their ability to provide adequate supervision, structure, or support to their children.
5. Even a modest reduction in recidivism rates for the "8% problem" group identified in this study effort could result in major, long-term savings for Orange County's criminal justice system.

Toward the Development of "8% Problem" Solutions

In the spring of 1993, the Orange County Probation Department was awarded a National Institute of Corrections (NIC) Program Development grant which provides technical assistance from NIC and Temple University staff to design an "8%" intervention program. For the past seven months, a multi-agency group has been meeting to plan the pilot project.

The recommended case identification procedures and assessment tools are currently undergoing field tests. The formal pilot project and research component are expected to be implemented in July 1994.

Key program components will include:

1. Providing adequate levels of supervision, structure, and support to minors and their families throughout the intervention process.
2. Promoting accountability by the minors for their actions and developing increased sensitivity to the impact of their actions on others.
3. Developing strategies that produce educational success, in part by assisting families to ensure that their minors attend school regularly.
4. Promoting pro-social values, behavior and relationships.
5. Developing individualized intervention strategies that are close to home and have strong follow-up beyond the "crisis" stage.
6. Strongly promoting teamwork among the family, professional staff, and community volunteers.

1999 Note: Due to Orange County's declaration of bankruptcy in December 1994, the field tests were continued into 1996. Based on the field test results, the validity of the theoretical model was confirmed. However, a number of process issues and critical program resources were identified as important for sustaining short-term positive program outcomes, i.e., for the first 6-12 months of wardship, in the longer term, e.g. to curtail serious, chronic juvenile offending and prevent the development of adult criminal careers.

Through a combination of local, state and federal funds, the proposed 8% Problem Solution was implemented with the desired formal experimental research component in June 1997. This demonstration program/research project will continue through June 2001.

U.S. Department of Justice
Office of Justice Programs
Office of Juvenile Justice and Delinquency Prevention

CHILD delinquency
Bulletin Series

J. Robert Flores, Administrator

April 2003

A Message from OJJDP

Preventing children from engaging in delinquent behavior is one of OJJDP's primary goals. Early intervention is crucial to achieving this goal, and understanding the factors related to child delinquency is essential to effective early childhood intervention. As part of its effort to understand and respond to these needs, OJJDP formed the Study Group on Very Young Offenders.

This Bulletin, part of OJJDP's Child Delinquency Series, focuses on four types of risk and protective factors: individual, family, peer, and school and community. It is derived from the chapters devoted to these critical areas for prevention and intervention in the Study Group's final report, *Child Delinquents: Development, Intervention, and Service Needs.*

To succeed, intervention methods designed to prevent child delinquency from escalating into serious and violent juvenile offending must address a range of risk and protective factors. In addition to the factors addressed in this Bulletin, OJJDP is pursuing research to examine the role of religious traditions and training as protective factors in the life of a child.

Preventing delinquency early in a child's life can pay significant dividends by reducing crime rates and decreasing crime-related expenditures of tax dollars. More important, it can help children avoid the consequences of delinquent behavior by increasing their chances of leading law-abiding and productive lives.

Risk and Protective Factors of Child Delinquency

Gail A. Wasserman, Kate Keenan, Richard E. Tremblay, John D. Coie, Todd I. Herrenkohl, Rolf Loeber, and David Petechuk

Sparked by high-profile cases involving children who commit violent crimes, public concerns regarding child delinquents have escalated. Compared with juveniles whose delinquent behavior begins later in adolescence, child delinquents (offenders younger than age 13) face a greater risk of becoming serious, violent, and chronic juvenile offenders. OJJDP formed the Study Group on Very Young Offenders to examine the prevalence and frequency of offending by children younger than 13. This Study Group identified particular risk and protective factors that are crucial to developing effective early intervention and protection programs for very young offenders.

This Bulletin is part of OJJDP's Child Delinquency Series, which presents the findings of the Study Group on Very Young Offenders. This series offers the latest information about child delinquency, including analyses of child delinquency statistics, insights into the origins of very young offending, and descriptions of early intervention programs and approaches that work to prevent the development of delinquent behavior by focusing on risk and protective factors.

Some aspects of children's behaviors, such as temperament, are established during the first 5 years of life. This foundation, coupled with children's exposure to certain risk and protective factors, influences the likelihood of children becoming delinquent at a young age. However, the identification of these multiple risk and protective factors has proven to be a difficult task. Although no magic solutions exist for preventing or correcting child delinquency, identifying risk and protective factors remains essential to developing interventions to prevent child delinquency from escalating into chronic criminality.

According to the Study Group on Very Young Offenders, a group of 39 experts on child delinquency and child psychopathology convened by the Office of Juvenile Justice and Delinquency Prevention (OJJDP), risk factors for child delinquency operate in several domains: the individual child, the child's family, the child's peer group, the child's school, the child's neighborhood, and the media. Most professionals agree that no single risk factor leads a young child to delinquency. Rather,

the likelihood of early juvenile offending increases as the number of risk factors and risk factor domains increases.

Although some risk factors are common to many child delinquents, the patterns and particular combination of risk factors vary from child to child. Professionals have learned a great deal about which risk and protective factors are relevant for screening and intervention. For example, most professionals agree that early on in a child's life, the most important risks stem from individual factors (e.g., birth complications, hyperactivity, sensation seeking, temperamental difficulties) and family factors (e.g., parental antisocial or criminal behavior, substance abuse, and poor child-rearing practices). As the child grows older and becomes integrated into society, new risk factors related to peer influences, the school, and the community begin to play a larger role.

Although focusing on risk factors is important, examining protective factors that reduce the risk of delinquency is as important for identifying interventions that are likely to work. For example, some common protective factors against child delinquency and disruptive behavior are female gender, prosocial behavior (such as empathy) during the preschool years, and good cognitive performance (for example, appropriate language development and good academic performance). The proportion of protective factors to risk factors has a significant influence on child delinquency, and protective factors may offset the influence of children's exposure to multiple risk factors.

This Bulletin is based on four chapters from the Study Group's final report, *Child Delinquents: Development, Intervention, and Service Needs* (Loeber and Farrington, 2001): "Individual Risk and Protective Factors," "Family Risk and Protective Factors," "Peer Factors and Interventions," and "School and Community Risk Factors and Interventions."

Child Delinquency Research: An Overview

Historically, delinquency studies have focused on later adolescence, the time when delinquency usually peaks. This was particularly true in the 1990s, when most researchers studied chronic juvenile offenders because they committed a disproportionately large amount of crime. Research conducted during this period by OJJDP's Study Group on Serious and Violent Juvenile Offenders concluded that youth referred to juvenile court for their first delinquent offense before age 13 are far more likely to become chronic offenders than youth first referred to court at a later age. To better understand the implications of this finding, OJJDP convened the Study Group on Very Young Offenders in 1998. Its charge was to analyze existing data and to address key issues that had not previously been studied in the literature. Consisting of 16 primary study group members and 23 coauthors who are experts on child delinquency and psychopathology, the Study Group found evidence that some young children engage in very serious antisocial behavior and that, in some cases, this behavior foreshadows early delinquency. The Study Group also identified several important risk factors that, when combined, may be related to the onset of early offending. The Study Group report concluded with a review of preventive and remedial interventions relevant to child delinquency.

The Child Delinquency Bulletin Series is drawn from the Study Group's final report, which was completed in 2001 under grant number 95–JD–FX–0018 and subsequently published by Sage Publications as *Child Delinquents: Development, Intervention, and Service Needs* (edited by Rolf Loeber and David P. Farrington). OJJDP encourages parents, educators, and the juvenile justice community to use this information to address the needs of young offenders by planning and implementing more effective interventions.

The risk factors for child delinquency discussed in this Bulletin are categorized into four groups: (1) individual, (2) family, (3) peer, and (4) school and community. A greater understanding of these risk and protective factors could serve as the basis for future social policies designed to prevent and control delinquency (see Burns et al., in press, another OJJDP Bulletin in this series).

Individual Risk Factors

Children's behavior is the result of genetic, social, and environmental factors. In relation to child delinquency, the Study Group defined individual risk and protective factors as an individual's genetic, emotional, cognitive, physical, and social characteristics. These factors are frequently interrelated, yet the underlying mechanism of how this occurs is not fully understood.

Antisocial Behavior

Early antisocial behavior may be the best predictor of later delinquency. Antisocial behaviors generally include various forms of oppositional rule violation and aggression, such as theft, physical fighting, and vandalism. In fact, early aggression appears to be the most significant social behavior characteristic to predict delinquent behavior before age 13. In one study, physical aggression in kindergarten was the best and only predictor of later involvement in property crimes (Haapasalo and Tremblay, 1994; Tremblay et al., 1994). In contrast, prosocial behavior (such as helping, sharing, and cooperation), as rated by teachers, appeared to be a protective factor, specifically for those who have risk factors for committing violent and property crimes before age 13.

Studies conducted in Canada, England, New Zealand, Sweden, and the United

Childhood Risk Factors for Child Delinquency and Later Violent Juvenile Offending

The following risk factors are discussed in this Bulletin.

Individual factors

- Early antisocial behavior
- Emotional factors such as high behavioral activation and low behavioral inhibition
- Poor cognitive development
- Low intelligence
- Hyperactivity

Family factors

- Parenting
- Maltreatment
- Family violence
- Divorce
- Parental psychopathology
- Familial antisocial behaviors
- Teenage parenthood
- Family structure
- Large family size

Peer factors

- Association with deviant peers
- Peer rejection

School and community factors

- Failure to bond to school
- Poor academic performance
- Low academic aspirations
- Living in a poor family
- Neighborhood disadvantage
- Disorganized neighborhoods
- Concentration of delinquent peer groups
- Access to weapons

Source: This list is largely based on R. Loeber and D.P. Farrington, eds. 2001. *Child Delinquents: Development, Intervention, and Service Needs.* Thousand Oaks, CA: Sage Publications, Inc.

States have confirmed that early antisocial behavior tends to be the best predictor of early-onset delinquency for boys. For example, in a study by Patterson and colleagues, antisocial behavior was the best predictor of age at first arrest when compared with family social disadvantage, parental monitoring, and parental discipline. Long-term results also indicated that those with an early arrest (before age 13) were most likely to be chronic offenders by age 18 (Patterson, Crosby, and Vuchinich, 1992; Patterson et al., 1998). Likewise, the Cambridge Study in Delinquent Development in London, England, showed that one of the strongest predictors of a conviction between ages 10 and 13 was troublesome behavior between the ages of 8 and 10, as rated by teachers and peers (Farrington, 1986).

In another study, the two best predictors of later antisocial behavior were mothers' ratings of their children as difficult to manage at 3 years of age and parents' ratings of behavior problems at 5 years of age (White et al., 1990). Most children whose caregivers perceived them as difficult to manage at age 3 did not become delinquents before age 13. However, most children who became delinquents before age 13 had behavior problems that had emerged in the first years of life.

Emotional Factors

Although early aggressive behavior is the most apparent and best predictor of later delinquency, other individual factors may contribute to later antisocial behaviors. By the end of the third year of life, children can express the entire range of human emotions, including anger, pride, shame, and guilt. Parents, teachers, and even peers affect children's socialization of emotional expression and help them learn to manage negative emotions constructively. Thus, how children express emotions, especially anger, early in life may contribute to or reduce their risk for delinquency.

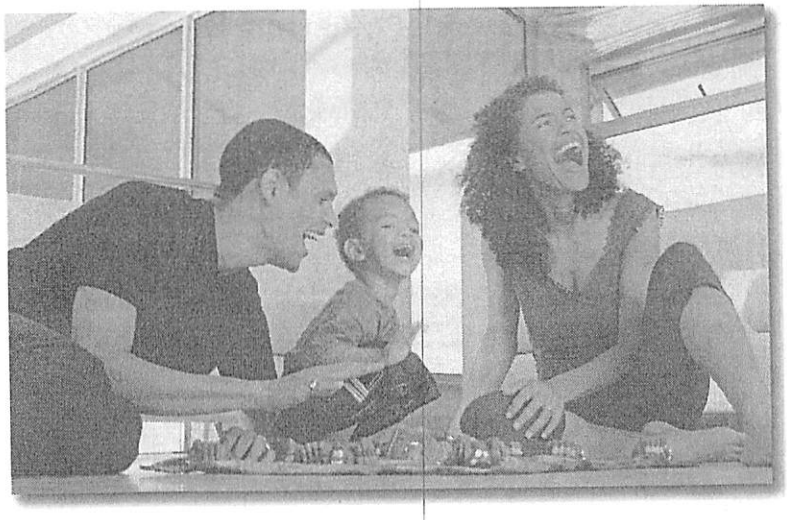
Many studies of delinquency have focused on the concepts of behavioral inhibition and behavioral activation. Behavioral inhibition (in response to a new stimulus or punishment) includes fearfulness, anxiety, timidity, and shyness. Behavioral activation includes novelty and sensation seeking, impulsivity, hyperactivity, and predatory aggression. The Study Group found evidence that high levels of behavioral activation and low levels of behavioral inhibition are risk factors for antisocial behavior. For example, high levels of daring behavior at ages 8–10 predicted convictions and self-reported delinquency before age 21, whereas measures of anxiety and guilt did not (Farrington, 1998). Overall, studies have shown that impulsive, not anxious, boys are more likely to commit delinquent acts at 12 to 13 years of age. More studies are needed to determine whether emotional characteristics in childhood are causes of or simply correlates of later antisocial behavior.

Cognitive Development

Emotional and cognitive development appear to be associated with children's ability to control social behavior within the first 2 years of life. Evidence suggests that these factors play an important role in the development of early delinquency and may affect the learning of social rules. In addition to traditional measures such as IQ, the Study Group considered cognitive development in terms of language development, social cognition, academic achievement, and neuropsychological function.

The Terrible Twos

The Study Group identified evidence linking behavior problems around age 3 with delinquency by age 13. Antisocial behaviors, such as anger and physical aggression, can appear during the first year of life but often peak at the end of the second year after birth. Thus, before age 3, most children engage in behavior that would be considered antisocial at a later age, including physical aggression. However, most children outgrow early problem behavior. The ones who do not outgrow such behavior are of concern here because of the increased risk that they may become child delinquents.



Poor cognitive development and behavior problems during early childhood could explain the association between academic achievement and delinquency. For example, numerous studies have shown that delinquents' verbal IQs tend to be lower than their nonverbal IQs (e.g., Moffitt, 1993). Delinquents also have lower mean global IQs and lower school achievement rates compared with nondelinquents (e.g., Fergusson and Horwood, 1995; Maguin and Loeber, 1996).

Mild neuropsychological deficits present at birth can snowball into serious behavior problems by affecting an infant's temperament (Moffitt, 1993). These deficits can affect children's control of behaviors such as language, aggression, oppositional behavior, attention, and hyperactivity. Basic cognitive deficits may also be associated with impaired social cognitive processes, such as failure to attend to appropriate social cues (e.g., adults' instructions, peers' social initiations).

Hyperactivity

Studies have shown that restless, squirmy, and fidgety children are more likely to be involved in later delinquent behavior (e.g., Farrington, Loeber, and Van Kammen, 1990; Lynam, 1997). Clinical studies of hyperactive children have shown that they also are at high risk of delinquency (e.g., Loeber et al., 1995). For example, motor restlessness (hyperactive or hyperkinetic behavior), as rated by kindergarten teachers, was a better predictor of delinquency between ages 10 and 13 than lack of prosocial behavior and low anxiety (Tremblay et al., 1994). Another study concluded that hyperactivity leads to delinquency only when it occurs with physical aggression or oppositional behavior (Lahey, McBurnett, and Loeber, 2000).

Family Risk Factors

Children and their families defy narrow descriptions. Social, environmental, and family risk factors tend to cluster, and any number of them can occur together within the same family. Understanding the role and influence of each of these factors is a difficult task. For example, early child offending may develop through several pathways. For some children, the primary risk factor may be a family risk factor such as lack of parental supervision; for others, it may be an individual risk factor such as a diagnosis of attention deficit hyperactivity disorder (Cicchetti and Rogosch, 1996).

A Question About Biological Factors

All behavior, including delinquency, is influenced by biological factors. These factors include not only physical strength but also brain functioning, such as neurotransmitters that pass signals to the brain. Serotonin receptors, for instance, are neurotransmitters that have been associated with impulsive behavior (Goldman, Lappalainen, and Ozaki, 1996). Other biological factors have also been associated with delinquency. Compared to nondelinquents, delinquents tend to have a lower heart rate and a lower skin response (Raine, 1993), which are measures of autonomic nervous activity. Another line of research has concentrated on hormones, including testosterone. However, a high level of testosterone during the elementary school years is not known to predict later delinquency. Currently, research on genes has come as far as the identification of proteins associated with neurotransmitters, but it is unlikely to shed light on complex processes such as delinquency (Rowe, 2002). In summary, it is far from clear to what extent biological processes determine delinquency at a young age.

Studies have shown that inadequate child-rearing practices, home discord, and child maltreatment are associated with early-onset delinquency (e.g., Derzon and Lipsey, 2000). In addition, the strongest predictors of early-onset violence include family size and parental antisocial history. Early temperamental difficulties in the child coupled with parental deficiencies that interfere with proactive parenting are also thought to be important in the development of early-onset behavior problems.

In looking at the clustering of family risk factors, one goal is to identify which combinations of risk factors promote early misbehavior because, more than likely, early misbehavior is the result of an accumulation of a number of factors. The number of risk factors and stressors and the length of exposure to them have a strong impact on child behavior (e.g., Tiet et al., 1998; Williams et al., 1990).

A number of social adversities in families can affect children's delinquency. These factors include parenting, maltreatment, family violence, divorce, parental psychopathology, familial antisocial behaviors, teenage parenthood, family structure, and family size.

Parenting

Inadequate parenting practices are among the most powerful predictors of early antisocial behavior (e.g., Hawkins et al., 1998). Compared with families in which the children do not have conduct problems, families of young children with conduct problems have been found to be eight times more likely to engage in conflicts involving discipline, to engage in half as many positive interactions, and, often unintentionally, to reinforce negative child behavior (Gardner, 1987; Patterson and Stouthamer-Loeber, 1984). Three specific parental practices are particularly associated with early conduct problems: (1) a high level of parent-child conflict, (2) poor monitoring, and (3) a low level of positive involvement (Wasserman et al., 1996). In the Pittsburgh Youth Study, the co-occurrence of low levels of monitoring and high levels of punishment increased the risk of delinquency in 7- to 13-year-old boys. Conversely, attachments to conventional parents and to society's institutions are hypothesized to protect against developing antisocial behavior (Hirschi, 1969).

Maltreatment

Child maltreatment or abuse commonly occurs with other family risk factors associated with early-onset offending. Focusing specifically on the relationship between physical abuse and children's aggression, one study suggests that 20 percent of abused children become delinquent before reaching adulthood (Lewis, Mallouh, and Webb, 1989). Clearly, most physically abused children do not go on to become antisocial or violent. However, one study that compared children without a history of abuse or neglect with children who had been abused or neglected found that the latter group accrued more juvenile and adult arrests by the age of 25 (Widom, 1989). Abused or neglected children also offended more frequently and began doing so at earlier ages.

Family Violence

Each year, approximately 3.3 million children witness physical and verbal spouse abuse (Jaffe, Wolfe, and Wilson, 1990). Witnessing domestic violence has been linked to increased child behavior problems, especially for boys and younger children (Reid and Crisafulli, 1990). Little is known about the age range in which children may be most vulnerable or how long associations persist. In most families, when the woman is battered, children are also battered (McKibben, De Vos, and Newberger, 1989). The co-occurrence of child abuse and witnessing domestic violence affects children's adjustment more than twice as much as witnessing domestic violence alone (Hughes, Parkinson, and Vargo, 1989). Other factors that impose additional risk in violent families include a high incidence of other behavior problems (e.g., alcohol abuse and incarceration) in male batterers. Maternal psychological distress may also expose children to additional indirect risks, such as the mother being emotionally unavailable to the children (e.g., Zuckerman et al., 1995).

Divorce

Compared with boys whose parents remained married, boys whose parents divorced have been found to be more likely to have continuing problems with antisocial, coercive, and noncompliant behaviors through age 10 (Hetherington, 1989). As with many family factors, establishing the exact effects of divorce on children is difficult because of other co-occurring risks, such as the loss of a parent, other related negative life events (e.g., predivorce child behavior problems, family conflict, decrease in family income), and a parent's subsequent remarriage. When these related factors are considered, the impact of divorce itself is substantially less.

Parental Psychopathology

High rates (as high as 45 percent) of parental antisocial personality disorder have been consistently reported for parents of boys (including preadolescents) referred for conduct problems (e.g., Lahey et al., 1988). Similar rates occurred for parental substance abuse and depression (Robins, 1966). Depressed parents show many parenting deficiencies associated with increased antisocial behaviors in children, such as inconsistency, irritability, and lack of supervision (Cummings and Davies, 1994). Parental psychopathology has been linked to increased rates of psychiatric disorder among school-aged children (Costello et al., 1997). The Pittsburgh Youth Study found that the association between delinquency and parental anxiety or depression was stronger in younger than in older children (Loeber et al., 1998).

Familial Antisocial Behaviors

A long history of research demonstrates that aggressive behavior and criminality are more prevalent in some families than in others. For example, the Cambridge Study in Delinquent Development, which followed 411 families, found that offending was strongly concentrated in a small group of families and that approximately 5 percent of the families accounted for about half of the juvenile criminal convictions (West and Farrington, 1977).

Antisocial adults tend to select antisocial partners (e.g., Farrington, Barnes, and Lambert, 1996). Overall, antisocial parents show increased levels of family conflict, exercise poorer supervision, experience more family breakdown, and direct more hostility toward their children. In addition, having an antisocial sibling also increases a child's likelihood of antisocial behaviors (e.g., Farrington, 1995). The influences of siblings are stronger when the siblings are close in age.

Teenage Parenthood

Being born to a teenage mother has been found to strongly predict offending in adolescence (Conseur et al., 1997), although much of this effect may stem from the mother's own antisocial history and involvement with antisocial partners (Rutter, Giller, and Hagell 1998).

Family Structure

Many single parents are able to raise their children very well. However, children from single-mother households are at increased risk for poor behavioral outcome (Pearson et al., 1994; Vaden-Kiernan et al., 1995; McLanahan and Booth, 1989; Sampson, 1987), even controlling for the fact that single-mother households on average have fewer economic resources. Other factors could explain this relationship. Especially as compared with partnered women, single mothers report more mental health problems (e.g., Guttentag, Salasin, and Belle, 1980), have higher levels of residential mobility (McLanahan and Booth, 1989; McCormick, Workman-Daniels, and Brooks-Gunn, 1996), and have fewer resources to monitor their children's activities and whereabouts. Each of these factors on its own contributes to increased levels of early childhood behavior problems.

Family Size

The more children in a family, the greater the risk of delinquency. The Cambridge Study found that, compared with boys who had fewer siblings, boys who had four or more siblings by the age of 10 were twice as likely to offend, regardless of the parents' socioeconomic status (West and Farrington, 1973). These associations may be related to diminished supervision in larger families.

Peer Risk Factors

Peer influences on child delinquency usually appear developmentally later than do individual and family influences. Many children entering school, for example, already show aggressive and disruptive behaviors. Two major mechanisms associated with peer factors or influences are association with deviant peers and peer rejection.

Association With Deviant Peers

Association with deviant peers is related to increased co-offending and, in a minority of cases, the joining of gangs. Since a 1931 report showing that 80 percent of Chicago juvenile delinquents were arrested with co-offenders, empirical evidence has supported the theory that deviant peer associations contribute to juvenile offending (Shaw and McKay, 1931). The unresolved question is whether deviant peers model and reinforce antisocial behaviors or whether the association with deviant peers is simply another manifestation of a child's predisposition to delinquency. In other words, do "birds of a feather flock together" or does "bad company corrupt"?

The Study Group found that a strong case could be made that deviant peers influence nondelinquent juveniles to become delinquent. For example, according to data from the National Youth Survey on a representative sample of U.S. juveniles ages 11 to 17, the most frequent pattern was a child moving from association with nondelinquent peers to association with slightly deviant peers, and then on to commission of minor offenses. More frequent association with deviant peers and more serious offending followed, leading to the highest level of association with deviant peers (Elliott and Menard, 1996; Keenan et al., 1995).

Deviant peers influence juveniles who already have some history of delinquent behavior to increase the severity or frequency of their offending. A few studies of children younger than 14 support this hypothesis. For example, in a study of Iowa juveniles, involvement in the juvenile justice system was highest for those who engaged in disruptive behavior and associated with deviant peers at a young age (Simons et al., 1994). The Study Group concluded that deviant

Sibling Influences

Based on data from the 1979 National Longitudinal Survey of Youth, a number of publications have underscored the role played by siblings in influencing delinquent behavior in both the domains of family and peer influence. For example, compared with teens with lower rates of offending, teens with high rates of offending were more likely to have siblings who also committed delinquent acts at a high rate. Some studies speculate that older siblings who are prone to delinquent behavior may reinforce antisocial behavior in a younger sibling, especially when there is a close, warm relationship (Rowe and Gulley, 1992).

peers contribute to serious offending by child delinquents during the period of their transition to adolescence.

Although an extreme form of association with deviant peers, gangs provide a ready source of co-offenders. Not surprisingly, gang membership reflects the highest degree of deviant peer influence on offending. The Rochester Youth Development Study, the Denver Youth Survey, and the Seattle Social Development Project have all shown that gangs appear to exert a considerable influence on the delinquent behavior of individual members. Juveniles are joining gangs at younger ages, and the role of gangs in crimes committed by youthful offenders appears to be an increasing problem (Howell, 1998). In the case of violence, even after accounting for other risk factors (such as association with delinquent peers who are not gang members, family poverty, lack of parental supervision, and negative life events), gang membership still has the strongest relationship with self-reported violence (Battin et al., 1998).

Peer Rejection

The evidence that peer rejection in childhood is a risk factor for antisocial behaviors is relatively new compared with evidence about association with deviant peers. Recent findings have shown that young aggressive children who are rejected by peers are at significantly greater risk for later chronic antisocial behaviors than children who are not rejected, whether or not they were aggressive early on. For example, one study found that peer rejection in third grade predicted increasingly greater antisocial behaviors from sixth grade onward, even when boys' earlier aggressiveness was accounted for in the predictions (Coie et al., 1995). The frequency of violent offending in adolescence was greater for these rejected, aggressive juveniles, and they were more likely to persist in violent offending in early adulthood. In the early school years, peer rejection accentuates the relation between early attention and hyperactivity problems and conduct problems in fourth grade.

One explanation for the role of peer rejection in increasing antisocial behaviors is that it leads to greater suspiciousness of other people's motives as hostile and hence to greater aggression in response. A second explanation is that rejection causes children to have fewer positive social options and, consequently, to become part of lower status and deviant peer groups. Rejected, aggressive children are more likely than others to be members of deviant peer groups and tend to be peripheral members of these groups (Bagwell et al., 2000). Their tenuous sense of belonging may dispose them to engage in more antisocial activity in an effort to gain standing in these groups.

Peer rejection and deviant peers are mediating factors rather than primary causes of child delinquency. As shown in the diagram (on page 8), early community, family, and individual risk factors can lead to early aggressive and disruptive behaviors. The already "at-risk" child then enters school, where peer risk factors can culminate in preadolescent or very early adolescent serious offending. The Study Group concluded that three factors combine to account for a juvenile's accelerated movement toward more serious offending in early adolescence:

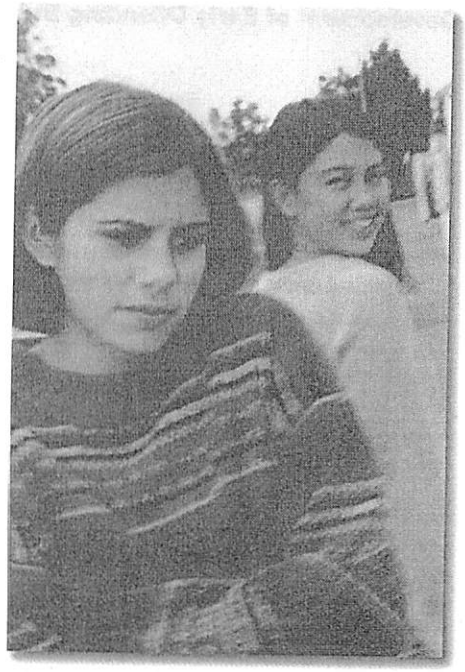
- The high-risk juvenile's own antisocial tendencies.
- The negative consequences of peer rejection resulting from these tendencies.
- The resulting deviant peer associations.

The Study Group believes that peer influence is an important mediating factor in child delinquency. Research suggests that peer influence has an impact on delinquency in two ways: (1) the initial offending of relatively late starters and (2) the escalation of serious offending among very early starters.

School and Community Risk Factors

Few studies have addressed risk factors that emerge from young children's socialization in schools and communities. The Study Group focused on a social development model integrating insights from current theories that consider the influence of community and schools on child delinquents (Catalano and Hawkins, 1996; Farrington and Hawkins, 1991; Hawkins and Weis, 1985). The model proposes that socialization involves the same processes in producing either prosocial or antisocial behaviors. These processes include the following:

- Children's opportunity for involvement in activities and interactions with others.
- Children's degree of involvement and interaction with others.
- Children's ability (skills) to participate in these involvements and interactions.
- Reinforcements received from individuals for children's performance in involvements and interactions with others.



School Factors

The Study Group found that the failure to bond to school during childhood can lead to delinquency. In addition, as stated above, early neurological deficiencies, when combined with the failure of family, school, and community to provide adequate socialization, lead to early-onset offending that persists throughout life. A specific school risk factor for delinquency is poor academic performance. A meta-analysis of more than 100 studies examined the relationship between poor academic performance and delinquency and found that poor academic performance is related to the prevalence, onset, frequency, and seriousness of delinquency (Maguin and Loeber, 1996). In young children ages 8 to 11, academic performance has been related to serious later delinquency (Loeber et al., 1998). Even when individual intelligence and attention problems are taken into account, academic performance remains a predictor of delinquency.

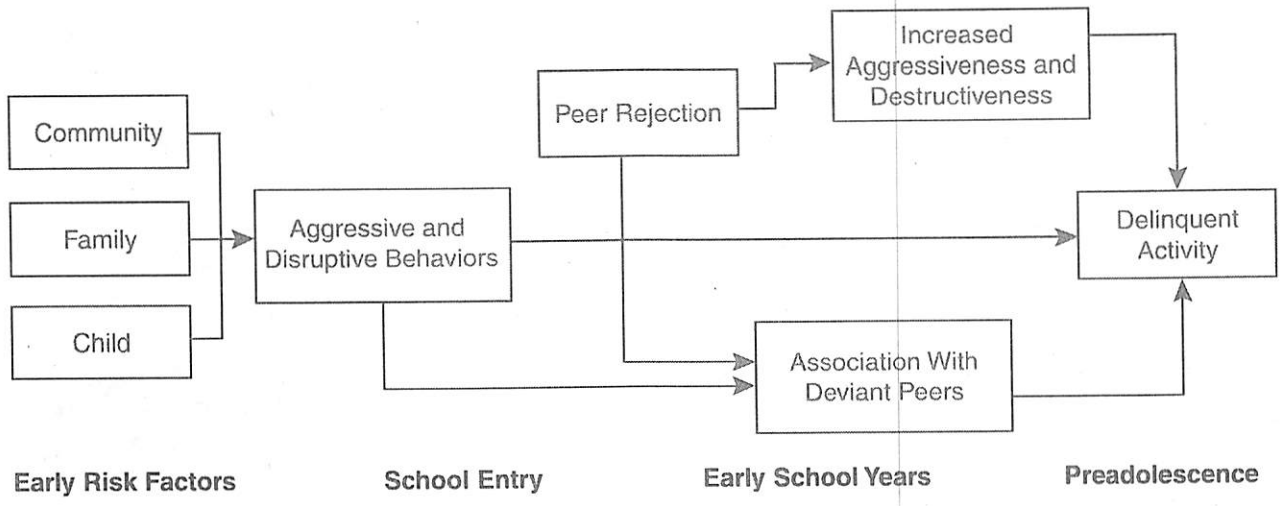
Children with weak bonds (low commitment) to school, low educational aspirations, and poor motivation are also at risk for general offending and for child delinquency (e.g., Hawkins et al., 1998; Le Blanc, Coté, and Loeber, 1991). It is likely that children who perform poorly on academic tasks will fail to develop strong bonds to school and will have lower expectations of success. As a result, academic achievement and school bonding are, in many ways, interdependent. For example, one study found that boys who engage in delinquency are less committed to school and are also more likely to have "shorter plans" for their schooling. These boys described themselves as bad students (Le Blanc et al., 1991).

Community Factors

Numerous risk factors for young children's offending lie within the community domain. For example, findings from studies of childhood exposure to family poverty have been very consistent. Children raised in poor, disadvantaged families are at greater risk for offending than children raised in relatively affluent families (e.g., Farrington, 1989, 1991, 1998). Disadvantages at the neighborhood level are also of primary importance in the development of antisocial behaviors (Catalano and Hawkins, 1996). Disorganized neighborhoods with few controls may have weak social control networks that allow criminal activity to go unmonitored and even unnoticed (e.g., Elliott et al., 1996; Sampson and Lauritsen, 1994). In terms of violent crimes, one study concluded that social disorganization and concentrated poverty within the community lead to residents' decreased willingness to intervene when children are engaging in antisocial/unlawful acts, further contributing to a greater likelihood of violence within neighborhoods (Sampson, Raudenbush, and Earls, 1997).

Certain residential areas may support greater opportunities for antisocial learning. For example, disadvantaged inner-city neighborhoods are often characterized by a predominance of delinquent peer groups and gangs that draw young people into crime (Sutherland and Cressey, 1970). Juveniles living within high-crime neighborhoods are often exposed to norms favorable to crime and are at high risk for offending (Developmental Research and Programs,

Development of Early Offending Behavior and Peer Influences



Source: J.D. Coie and S. Miller-Johnson. 2001. Peer factors and interventions. In *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions,* edited by R. Loeber and D.P. Farrington. Thousand Oaks, CA: Sage Publications, Inc., pp. 191–209.

Who's in Control at School?

Schools play an important role in the socialization of children and the development of antisocial behavior. When schools are poorly organized and operated, children are less likely to value their education and do well on academic tasks and more likely to experience peer influences that promote delinquency and opportunities for antisocial behavior (Gottfredson, 2001). For example, schools with fewer teacher resources and large enrollments of students have higher levels of teacher victimization by pupils. Teacher victimization is also higher in schools with lower cooperation between teachers and administrators and with poor rule enforcement. Furthermore, poor rule enforcement within schools has been associated with higher levels of student victimization. Disciplinary problems are also more common in schools with less satisfied teachers (Ostroff, 1992). Although much more research is needed on the relationship between school organization and processes and children's delinquency, available evidence suggests that, in addition to those already noted, several other specific school characteristics may be linked to antisocial behaviors of students, including poor student-teacher relations, norms and values supporting antisocial behaviors, and poorly defined rules and expectations for appropriate conduct.

1996). In addition, having ready access to weapons generally increases the risk for violence (Brewer et al., 1995).

Interventions

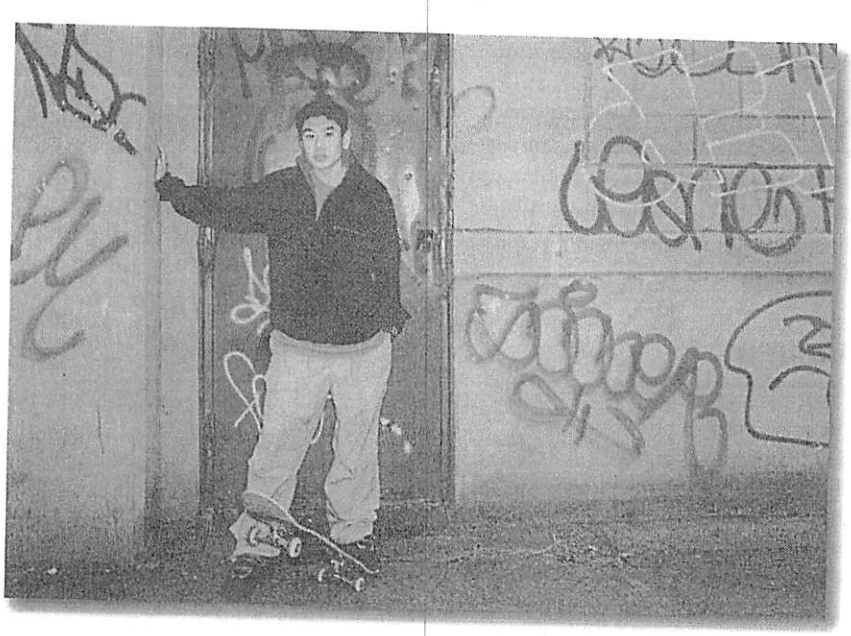
Although the Study Group's findings concerning interventions for child delinquency will be discussed more fully in *Treatment, Services, and Intervention Programs for Child Delinquents* (Burns et al., 2003), the following brief overview of the issues associated with intervention focuses on the risk factors just discussed. In general, the Study Group found that the number of adequately designed experimental interventions is insufficient to guide policymakers in their efforts to prevent child delinquency. The lack of interventions targeting antisocial behaviors in young children is particularly conspicuous. The Study Group believes focusing on children's early years is essential to better understand the socialization failures that lead to juvenile delinquency and, eventually, criminal behavior in adulthood.

Individual

If the impulse control necessary to avoid trouble is learned largely during the preschool years, the best time to help those who have difficulty in acquiring this control would be during the "sensitive period" of early childhood. It is difficult to imagine that later interventions would have nearly as much effect. Instead of looking for the onset of aggression and antisocial behaviors after children enter school, it is more important to focus on the preschool years, when clearly much of the development of impulse control is taking place (e.g., Broidy, Nagin, and Tremblay, 1999; Tremblay et al., 1998).

Family

Several types of programs provide family-based interventions. For example, Olds and colleagues (1998) reported on nurses' home visits to unmarried women living in households with low socioeconomic status during pregnancy to the end of the second year after birth. These visits subsequently had a positive effect on the 15-year-old children's reports of arrests, convictions, violations



Violence and the Media

Some studies have shown that antisocial behaviors, such as violence, can be learned by viewing violence in the media. For example, children exposed to high levels of television violence at age 8 were found to be more likely to behave aggressively at that age and subsequently, up to age 30 (Eron and Huesmann, 1987). In addition, children of parents who frequently watched violence on television and showed aggression were found to be more likely than other children to exhibit aggression and to prefer violent programs (Huesmann and Miller, 1994).

Bad Company

Sometimes even the best intentions go astray. The fact that antisocial juveniles are often grouped together in intervention programs may, in fact, promote friendships and alliances among these juveniles and intensify delinquent behavior rather than reduce it (e.g., McCord, 1997; Dishion, McCord, and Poulin, 1999). For example, group discussions among antisocial peers may inadvertently reinforce antisocial attitudes and promote antisocial friendships that may continue outside group sessions.

of probation, consumption of alcohol, sexual activity, and running away from home. Earlier reports (Olds et al., 1997; Olds et al., 1986) had shown that this intervention also reduced the incidence of childhood injuries and child abuse and neglect.

Many family-based interventions that focus on issues such as spousal violence and divorce conflict disregard children completely or deal with them only in the abstract. Conversely, interventions for reducing aggression in young children do not always target family issues, such as domestic violence or parental psychopathology, that may contribute to the child's behavior problems. Focused, family-based approaches, such as Parent Management Training (Wasserman and Miller, 1998), have helped reduce the risk of poor family management practices and physically abusive behavior, which can contribute to antisocial behaviors in children. Nevertheless, a lack of sensitivity to co-occurring risk factors has generally led to interventions that are too narrowly focused. As a result, they fail to address adequately the multiple sources of risk for children in family life.

Peers

Interventions to reduce antisocial behaviors associated with peer influence should focus on reducing contact with deviant peers for juveniles predisposed to antisocial behaviors and on promoting the development of prosocial skills (e.g., skills for resolving peer conflicts) (Hawkins and Weis, 1985). Studies have shown that peer relations training (in combination with parent training) reduces children's involvement with deviant peers during preadolescence, thus helping to protect them from subsequent involvement in delinquent activities.

School

Several types of school programs have shown promise as interventions for reducing aggressive behavior in the classroom. For example, evaluations of the Good Behavior Game showed that proactive behavior management can positively affect the long-term behavior of the most aggressive elementary school children (Murphy, Hutchinson, and Bailey, 1983; Kellam and Rebok, 1992; Kellam et al., 1994). The Seattle Social Development Project has also demonstrated effectiveness in reducing disruptive behavior in children (Hawkins et al., 1992; Hawkins, Von Cleve, and Catalano, 1991; Hawkins et al., 1999; O'Donnell et al., 1995). Numerous schools have also developed social competence curriculums to promote norms against aggressive, violent, and other antisocial behaviors (e.g., Greenberg, 1997). Other efforts include conflict resolution and violence prevention curriculums, bullying prevention programs, multicomponent classroom programs to improve academic achievement and reduce antisocial behaviors, after-school recreation programs, and mentoring programs.

Community

Because most studies have not specifically focused on child delinquency, surprisingly little is known about community risk factors for child delinquency. Several community approaches for preventing and reducing juvenile crime have been developed in recent years (e.g., Brewer et al., 1995; National Crime Prevention Council, 1994). Most take a comprehensive approach to addressing behavior across several risk domains, but their effect on child delinquency remains to be demonstrated. Multicomponent instruction programs have been developed in several big cities, and these programs will be discussed in *Treatment, Services, and Intervention Programs for Child Delinquents* (Burns et al., 2003).

Summary

The Study Group stresses that the focus on risk factors that appear at a young age is the key to preventing child delinquency and its escalation into chronic criminality. By intervening early, young children will be less likely to succumb to the accumulating risks that arise later in childhood and adolescence and less likely to incur the negative social and personal consequences of several years of disruptive and delinquent behaviors.

Child delinquency usually stems from a combination of factors that varies from child to child. No single risk factor is sufficient to explain it. To develop effective methods for preventing child delinquency and its escalation into serious and violent juvenile offending, intervention methods must account for the wide range of individual, family, peer, school, and community risk factors. Some effective intervention programs that focus on reducing persistent disruptive behavior in young children have reduced later serious, violent, and chronic offending. Some interventions focus on parent behaviors that increase the risk of persistent disruptive behavior in children. Peer relations training and school/classroom programs have also shown some promise. Still, many gaps exist in our knowledge about the development of child delinquency, the risk and protective factors that contribute to it, and effective prevention and intervention methods. Addressing these gaps offers an exceptional opportunity to reduce overall crime levels

and to decrease future expenditures of tax dollars.

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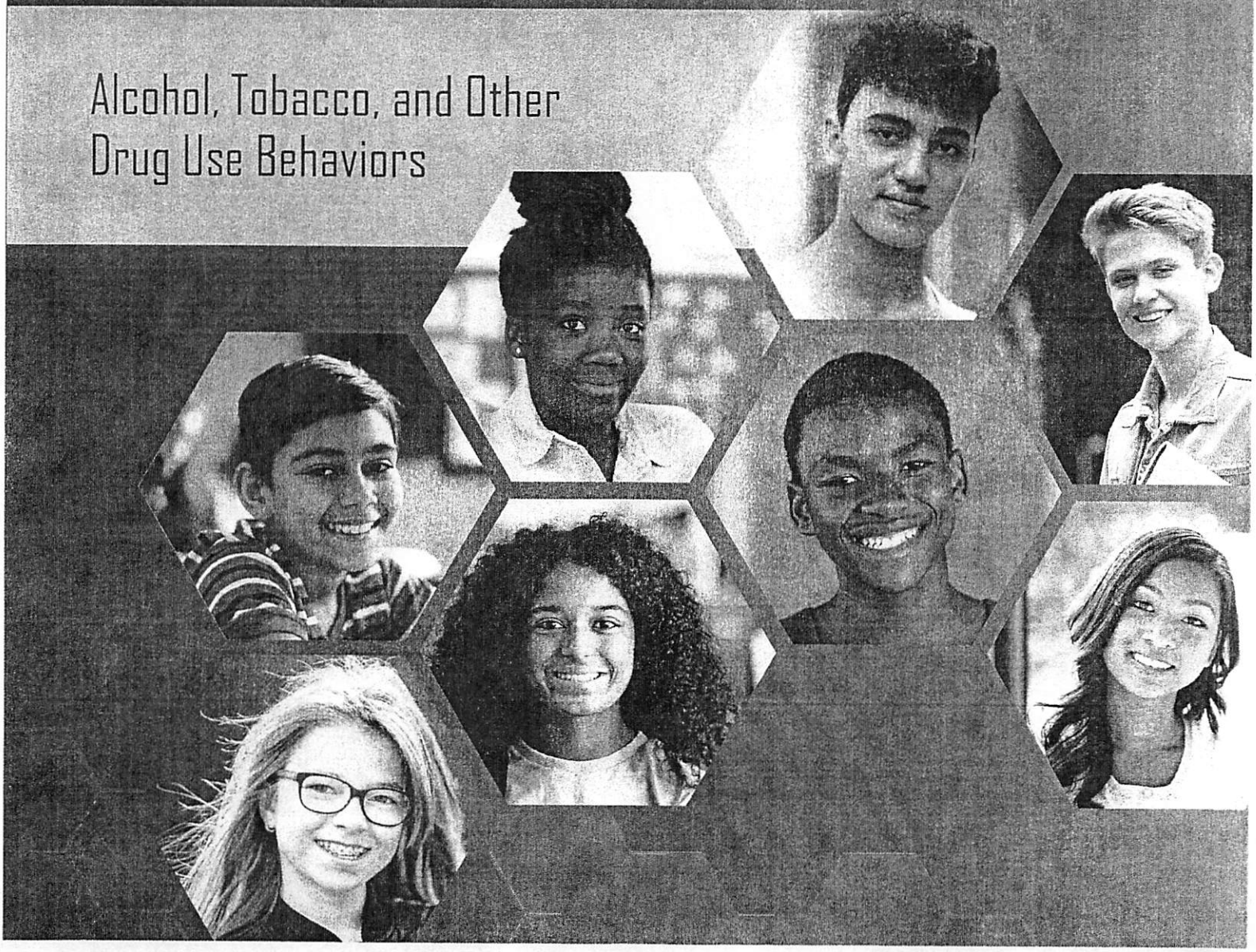
Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County Middle School Students, 2017

Alcohol, Tobacco, and Other Drug Use Behaviors

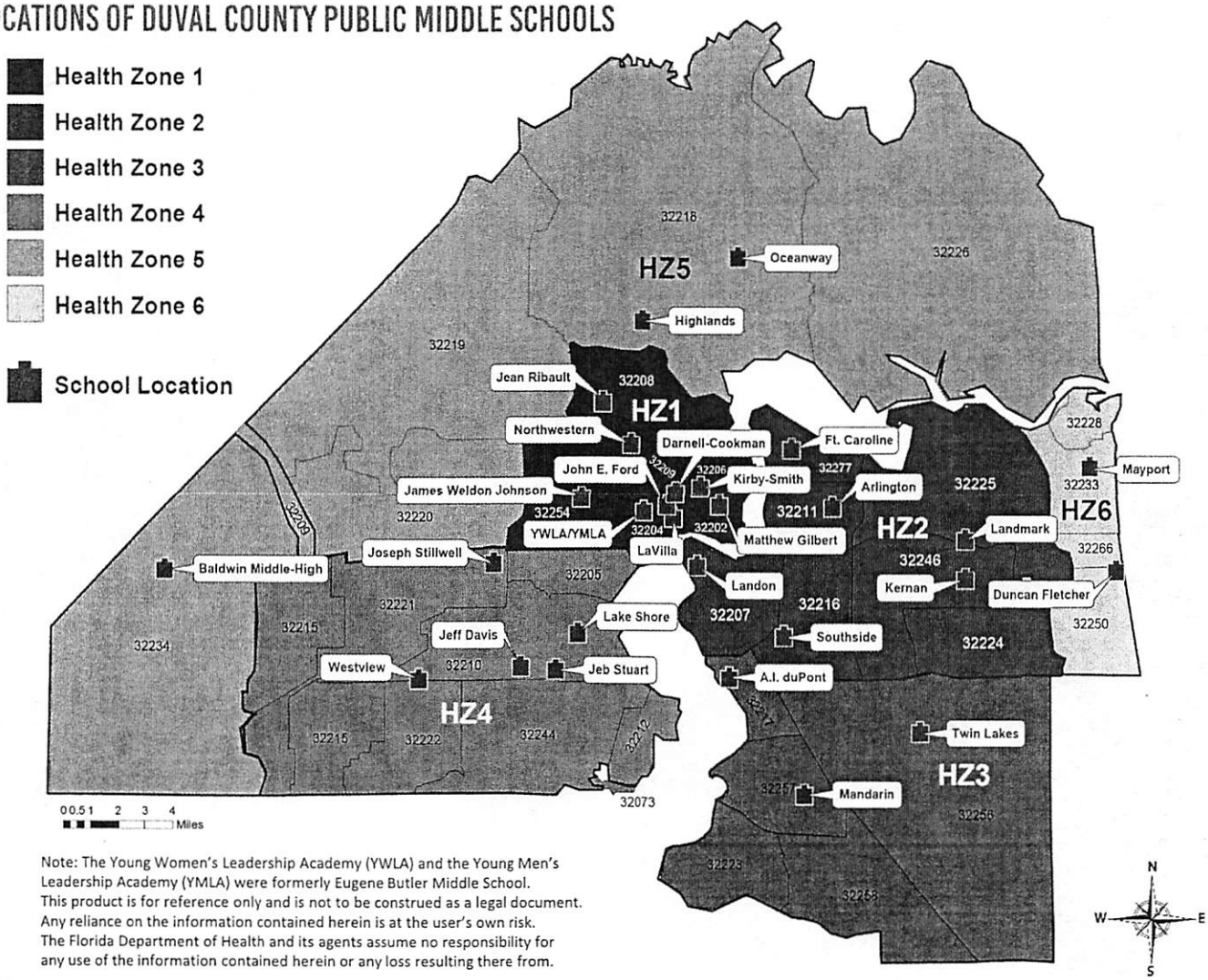


INTRODUCTION

The Youth Risk Behavior Survey (YRBS) is a self-administered, school-based, confidential, and anonymous survey that was conducted in Duval County Public Schools (DCPS) during the spring of 2009, 2011, 2013, 2015, and 2017. This is part of a national effort by the Centers for Disease Control and Prevention (CDC) to obtain information pertaining to youth health behaviors that contribute to the leading causes of death and disability among youth and adults. This report summarizes 2017 YRBS data on alcohol, tobacco, and drug use among Duval County middle school students. In 2017, 4,633 students from 29 Duval County public middle schools participated in the YRBS.

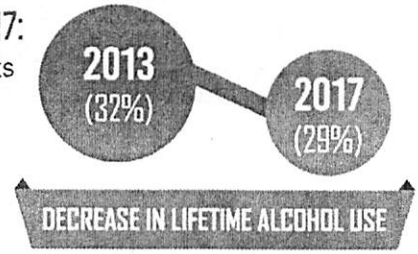
Duval County is located on the northeast coast of Florida and is comprised of urban, suburban, and pockets of rural areas. The County is divided into six Health Zones (HZ) which differ in terms of demographics, socioeconomic factors, and health outcomes. The HZs are based on mutually exclusive zip codes tied to county organization and demographics. The HZ analysis of the YRBS data increases our understanding of differences in the geographic distribution of health-related behaviors in Duval County and can assist in planning targeted health interventions.

LOCATIONS OF DUVAL COUNTY PUBLIC MIDDLE SCHOOLS



Note: The Young Women's Leadership Academy (YWLA) and the Young Men's Leadership Academy (YMLA) were formerly Eugene Butler Middle School.
This product is for reference only and is not to be construed as a legal document.
Any reliance on the information contained herein is at the user's own risk.
The Florida Department of Health and its agents assume no responsibility for any use of the information contained herein or any loss resulting there from.

MANY DUVAL COUNTY MIDDLE SCHOOL STUDENTS REPORT ALCOHOL AND MARIJUANA USE. IN 2017:



- About 1 in 4 middle school students reported lifetime alcohol use – a 21% decrease since 2013.
  - Of those who had tried alcohol, 14.0% had their first drink before age 11.
- About 1 in 7 middle school students have used marijuana at least once in their lifetime.
  - The percent of students reporting lifetime marijuana use was much higher in HZ 6, where 1 in 5 middle school students have used marijuana at least once.
- About 1 in 15 middle school students have used synthetic marijuana at least once in their lifetime – a 30% increase since 2015.
- About 3 in 4 middle school students say that their parents or other adults in their family disapprove of marijuana use.
- About 1 in 10 middle school students have used a prescription drug without a doctor's prescription at least once in their lifetime.

TOBACCO USE AMONG DUVAL COUNTY MIDDLE SCHOOL STUDENTS HAS DECLINED. IN 2017:

- About 1 in 14 middle school students have used cigarettes at least once in their lifetime – a 58% decrease since 2013.
  - Of those that had smoked a cigarette, 4.3% smoked their first cigarette before age 11.
- Over 1 in 5 students have used electronic vapor products at least once in their lifetime – a 9% decrease since 2015.
- About 1 in 11 middle school students currently used vapor products – a 12% decrease since 2015.

SUBSTANCE USE RISK FACTORS:

- Parents who use drugs and alcohol or who suffer from mental illness
- Substance use among peers
- Experiencing child abuse or maltreatment
- Neighborhood violence or poverty
- Norms and laws that are favorable to substance use

SUBSTANCE USE PROTECTIVE FACTORS:

- Good coping and problem solving skills
- Parental involvement
- Presence of mentors
- Faith-based resources and after-school activities
- Laws limiting the availability of tobacco and alcohol

CONSEQUENCES OF SUBSTANCE USE IN YOUTH:

- School problems, such as absenteeism and poor grades
- Social problems, such as fighting and lack of participation in youth activities
- Unwanted, unplanned, and unprotected sexual activity
- Higher risk for suicide and homicide
- Changes in brain development that may have life-long effects

Nationally, youth who start drinking before age 15 are six times more likely to develop alcohol dependency or abuse than those who start at or after age 21.

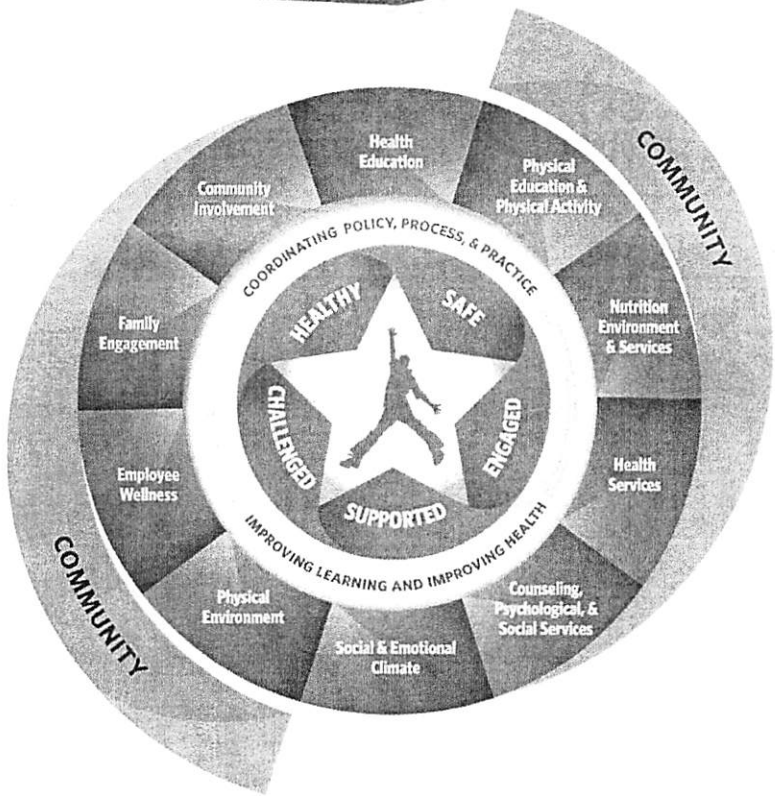
RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County
TOBACCO							
Lifetime cigarette use	11.8%[3]	7.3%	4.6%[6]	8.2%	8.1%	12.9%	7.9%[3]
Smoked a whole cigarette before age 11	6.4%[3]	4.9%	2.2%[6]	4.4%	4.9%	6.7%	4.3%
Current cigarette use*	7.0%	3.4%	2.9%	5.0%	5.4%	7.0%	4.6%
Current smokers that usually got their cigarettes by buying them at a store or gas station*	26.1%	37.7%	52.8%	36.2%	46.0%	23.3%	37.8%
Lifetime electronic vapor product use	22.5%	24.3%	18.6%[6]	25.2%	23.4%	30.4%	21.3%
Current electronic vapor product use*	14.6%[3]	10.4%	6.1%	9.7%	10.8%	13.4%	9.3%
ALCOHOL							
Lifetime alcohol use	33.7%	33.0%	26.2%	31.4%	31.6%	35.0%	28.6%
Had first drink of alcohol before age 11	14.6%	17.1%	13.4%	15.3%	13.7%	19.7%	14.0%
OTHER DRUG USE BEHAVIORS							
Lifetime marijuana use	15.3%	15.7%	10.2%[6]	17.6%	16.9%	19.8%	13.8%
Tried marijuana before age 11	6.5%	5.6%	3.0%[6]	4.9%	3.7%	8.4%	5.0%
Lifetime synthetic marijuana use	5.6%	6.8%	3.6%	7.6%	7.0%	7.7%	6.1%
Lifetime prescription drug use without a doctor's prescription	11.9%	9.7%	10.8%	11.5%	13.8%	9.2%	10.1%
Inhalant use before age 11	8.3%	10.1%	11.4%	8.1%	8.4%	9.0%	8.9%
Parents or other adults in their family disapprove of marijuana use	73.6%	77.8%	78.6%	73.4%	74.1%	70.4%	75.2%

Notes:
* = During the 30 days before the survey
Electronic vapor products = Includes e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, and e-hookahs
Synthetics = Includes K2, Spice, fake weed, King Kong, Yucatan Fire, and Moon Rocks

The superscript refers to a specific geographic area (e.g., superscript 1 refers to Health Zone 1, D refers to Duval County) and indicates that the data for that geographic area is significantly different from the reference geographic area.

Comparisons by County and State are provided by the CDC (See YRBS methodology at www.CDC.gov). Comparisons by Health Zone are provided by the Florida Department of Health in Duval County.

The CDC recommends a holistic approach to improving health behaviors and outcomes among youth. The Whole School, Whole Community, Whole Child (WSCC) model emphasizes that schools, health agencies, parents, and communities share a common goal of supporting health and academic achievement in adolescents. The WSCC model focuses its attention on the child, emphasizes a school-wide approach, and acknowledges learning, health, and the school as being a part of the local community. Importantly, the WSCC model provides a framework for how various sectors can work together to ensure that *every young person* is healthy, safe, engaged, supported, and challenged. This approach is illustrated in the image to the right.



Using information from the CDC and other research-based initiatives the table below provides recommendations for addressing alcohol, tobacco, and other substance use issues among youth.

Multifaceted programs that address prevalent issues result in programs that are more meaningful for the community, as well as more cost effective.

Implement school-based prevention programs	Programs focused on increasing academic and social competency in schools can support students by building skills related to good study habits, effective communication, relationship building, self-efficacy and assertiveness, and drug resistance.
Tailor programs to address risks and enhance strengths in a community	Using HZ data, interventions can be developed that address specific risks, such as use of a specific drug, that are most prevalent in a community. Evidence-based programs can also be tailored to more effectively address the needs of a community.
Target key transitional points	Rather than focusing only on identified at-risk populations, programs can be developed to target key transitional points in adolescent life (e.g., the transition from elementary school to middle school). This approach helps to remove labeling and stigma and promote bonding to the school and community.
Target co-occurring risk behaviors	Many health behaviors, such as substance use and sexual risk behaviors, share common underlying factors and tend to co-occur. Evidence-based prevention strategies that are most effective are those that address co-occurring risk behaviors.

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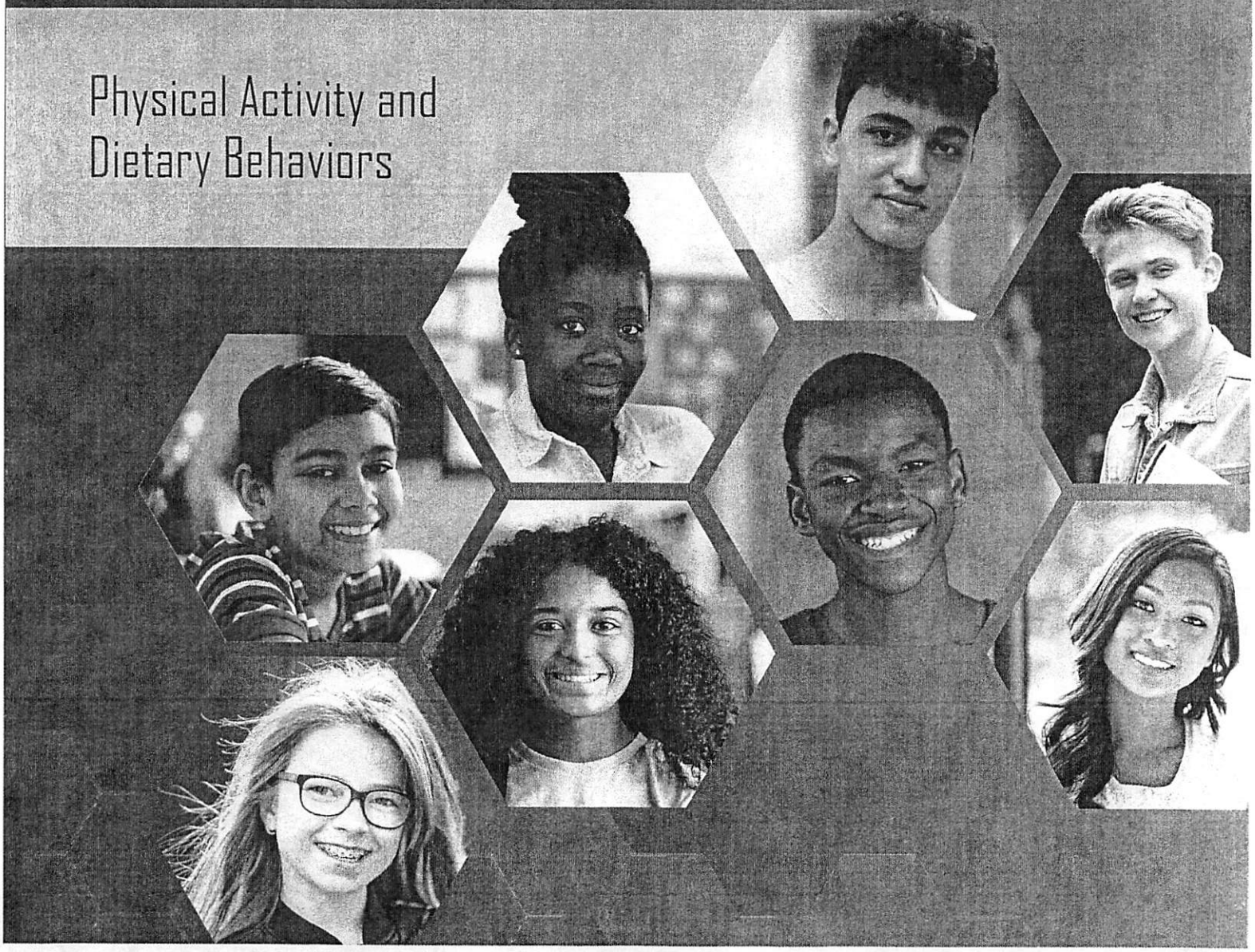
YOUTH RISK BEHAVIOR SURVEY

Duval County Middle School Students, 2017

Physical Activity and Dietary Behaviors



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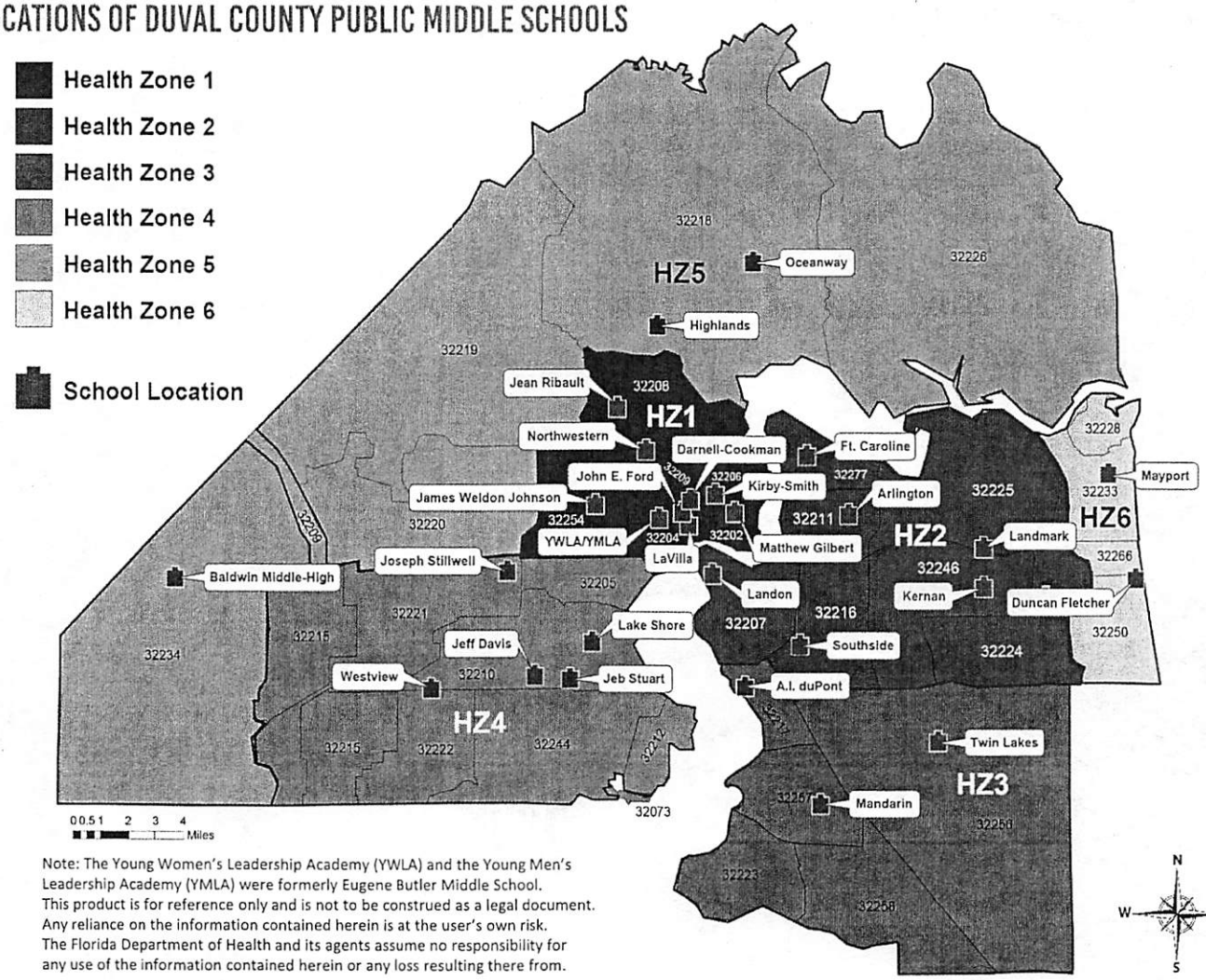
LOCATIONS OF DUVAL COUNTY PUBLIC MIDDLE SCHOOLS



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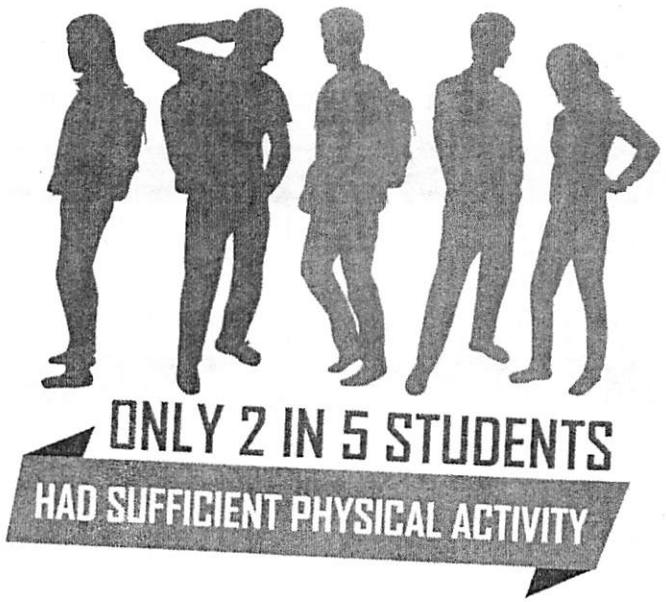
AMONG DUVAL COUNTY MIDDLE SCHOOL STUDENTS, PHYSICAL ACTIVITY AND HEALTHY EATING HAVE NOT IMPROVED. IN 2017:

- Only 2 in 5 students had sufficient physical activity. Male students (46.5%) were more likely to have sufficient physical activity than female students (37.2%).



- About 1 in 3 students watched 3 or more hours of TV per day.
- About 2 in 5 students had 3 or more hours of non-school related screen time per day.
- About 1 in 4 students described themselves as slightly or very overweight and over 2 in 5 were trying to lose weight.
- Over 1 in 2 students were involved in a sports team. Male students (58.7%) were more likely to be involved in a sports team than female students (48.9%).
- Only 1 in 4 students ate 3 or more servings of fruit on the day before the survey.
- Only 1 in 6 students ate 3 or more servings of vegetables on the day before the survey.
- About 1 in 4 students ate at least one meal from a fast food restaurant during the seven days before the survey.
- About 1 in 6 students sometimes, most of the time, or always went hungry because there is not enough food in their home.

OBESITY IS A COMPLEX HEALTH ISSUE.

Childhood obesity is linked to many physical, social, and psychological risks including:

- High blood pressure and high cholesterol
- Impaired glucose tolerance, insulin resistance, and type 2 diabetes
- Breathing problems
- Anxiety and depression
- Low self-esteem and self-reported quality of life
- Bullying and associated stigma

HEALTHY EATING AND PHYSICAL ACTIVITY HELP YOUTH:

- Achieve and maintain a healthy body weight
- Reduce the risk of developing health conditions, such as high blood pressure, type 2 diabetes, heart disease, and cancer
- Build strong bones and muscles
- Improve cardiorespiratory fitness
- Reduce symptoms of depression and anxiety

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	DUVAL COUNTY
PHYSICAL ACTIVITY							
Played on at least 1 sports team*	55.8%	52.2%	56.9%	52.4%	49.6%	54.9%	53.8%
Played video or computer games or used a computer 3 or more hours per day for something that was not school work**	43.8%	48.0%	40.1%	40.5%	47.5%	43.1%	42.7%
Were physically active at least 60 minutes per day on 5 or more days**	43.0%	42.7%	41.4%	39.6%	37.8%	39.0%	41.9%
Watched TV 3 or more hours per day***	23.1%	35.7%[1]	30.0%	32.4%	35.4%[1]	35.5%	31.7%[1]
OBESITY AND BODY IMAGE							
Described themselves as slightly or very overweight	28.5%	27.1%	25.8%	27.3%	26.5%	25.8%	26.2%
Were trying to lose weight	44.5%	47.1%	46.2%	45.4%	42.1%	42.7%	42.9%
DIETARY BEHAVIORS							
Ate at least 1 meal or snack from a fast food restaurant**	24.7%	23.4%	22.9%	20.9%	26.5%	26.9%	23.5%
Sometimes, most of the time or always went hungry because there was not enough food in their home*	15.8%	17.4%	15.1%	20.0%	19.7%	15.4%	17.5%
Drank 3 or more glasses of water yesterday	50.7%	47.1%	48.3%	43.1%	49.5%	43.2%	47.5%
Drank 1 or more energy drinks yesterday	22.9%	23.6%	21.0%	23.0%	26.1%	25.5%	24.1%
Ate 3 or more fruits yesterday	21.9%	21.7%	24.7%	25.2%	20.3%	18.0%	23.7%
Ate 3 or more vegetables yesterday	15.7%	15.5%	18.5%	14.5%	16.5%	14.7%	15.9%
OTHER HEALTH-RELATED FACTORS							
Slept for at least 8 hours***	55.8%	49.0%	47.2%	47.7%	48.1%	52.6%	49.5%
Lifetime asthma	23.1%	22.2%	20.3%	25.6%	21.1%	23.6%	22.5%

Notes:
* = During the 12 months before the survey ** = During the 7 days before the survey *** = On an average school day

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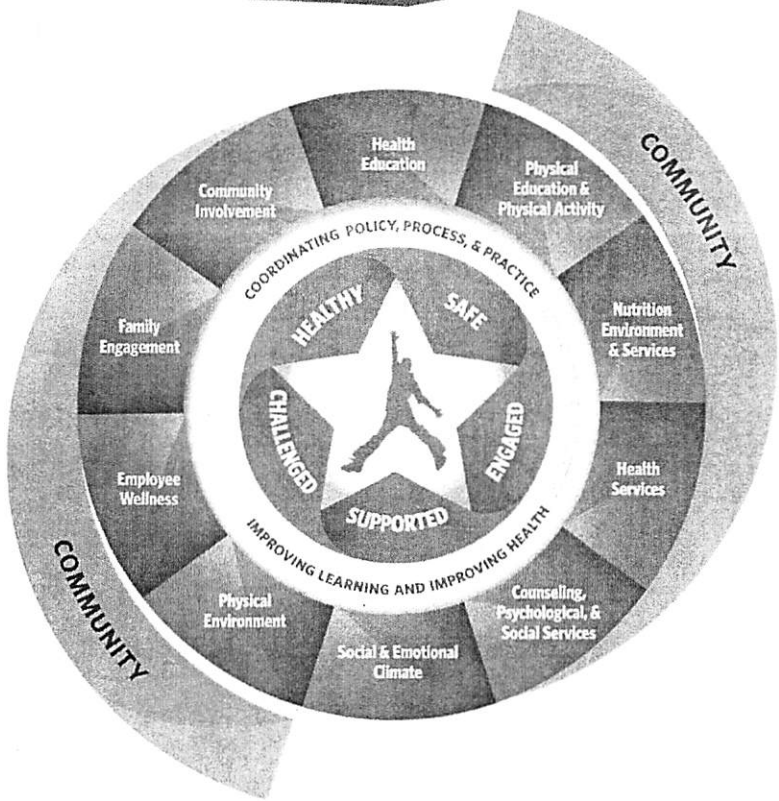
The CDC recommends a holistic approach to improving health behaviors and outcomes among youth. The Whole School, Whole Community, Whole Child (WSCC) model emphasizes that schools, health agencies, parents, and communities share a common goal of supporting health and academic achievement in adolescents. The WSCC model focuses its attention on the child, emphasizes a school-wide approach, and acknowledges learning, health, and the school as being a part of the local community. Importantly, the WSCC model provides a framework for how various sectors can work together to ensure that *every young person* is healthy, safe, engaged, supported, and challenged. This approach is illustrated in the image to the right.



Using information from the CDC and other research-based initiatives the below content provides recommendations for continued progress in supporting an active and healthy lifestyle in Duval County.

INTERVENTION STRATEGIES

Get parents involved to encourage active behavior. Family fitness can help increase family connectedness, manage weight, reduce risk for chronic conditions, and boost academic performance.

Provide the means necessary for youth to be physically active on a daily basis. Building sidewalks and bike lanes and improving neighborhood safety can play a major role in increasing physical activity.

Encourage personal goals. Teens are more likely to engage in behaviors, such as physical activity and healthy eating, when they set their own personal goals. Short-term goals that involve specific, daily behaviors are more likely to lead to behavior change.

Improve the availability and affordability of public transportation to increase access to healthy food options. Expanding public transportation also increases physical activity, as most users walk or bicycle to access public transportation.

School staff can be positive role models for students by being physically active in and out of school. Staff members can support recess, clubs, intramural programs, and other physical activity offerings.

Help find safe places for youth to be physically active. Promote safe routes to walk or bike to school. Encourage community organizations to offer physical activity programs for youth.

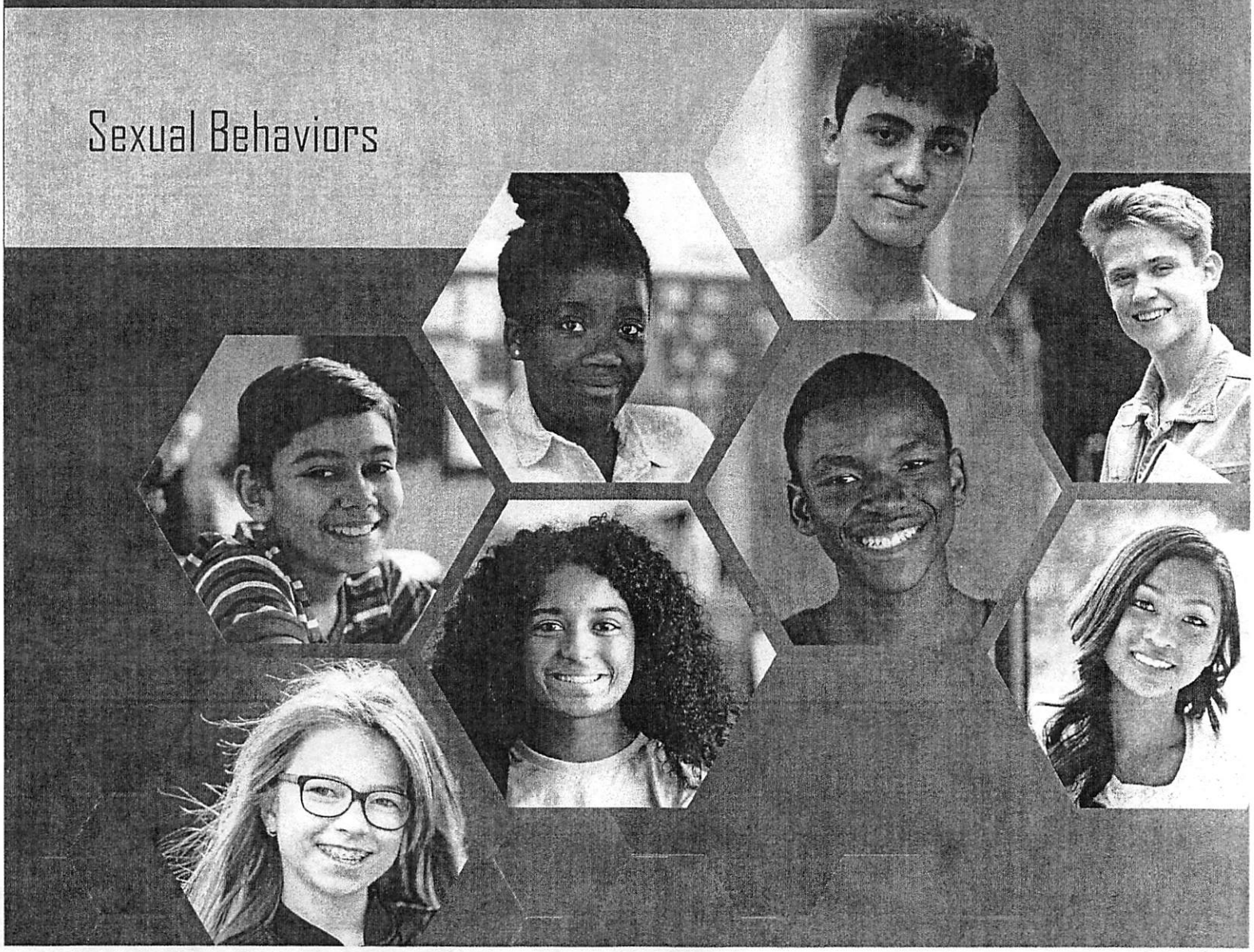
Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County Middle School Students, 2017

Sexual Behaviors

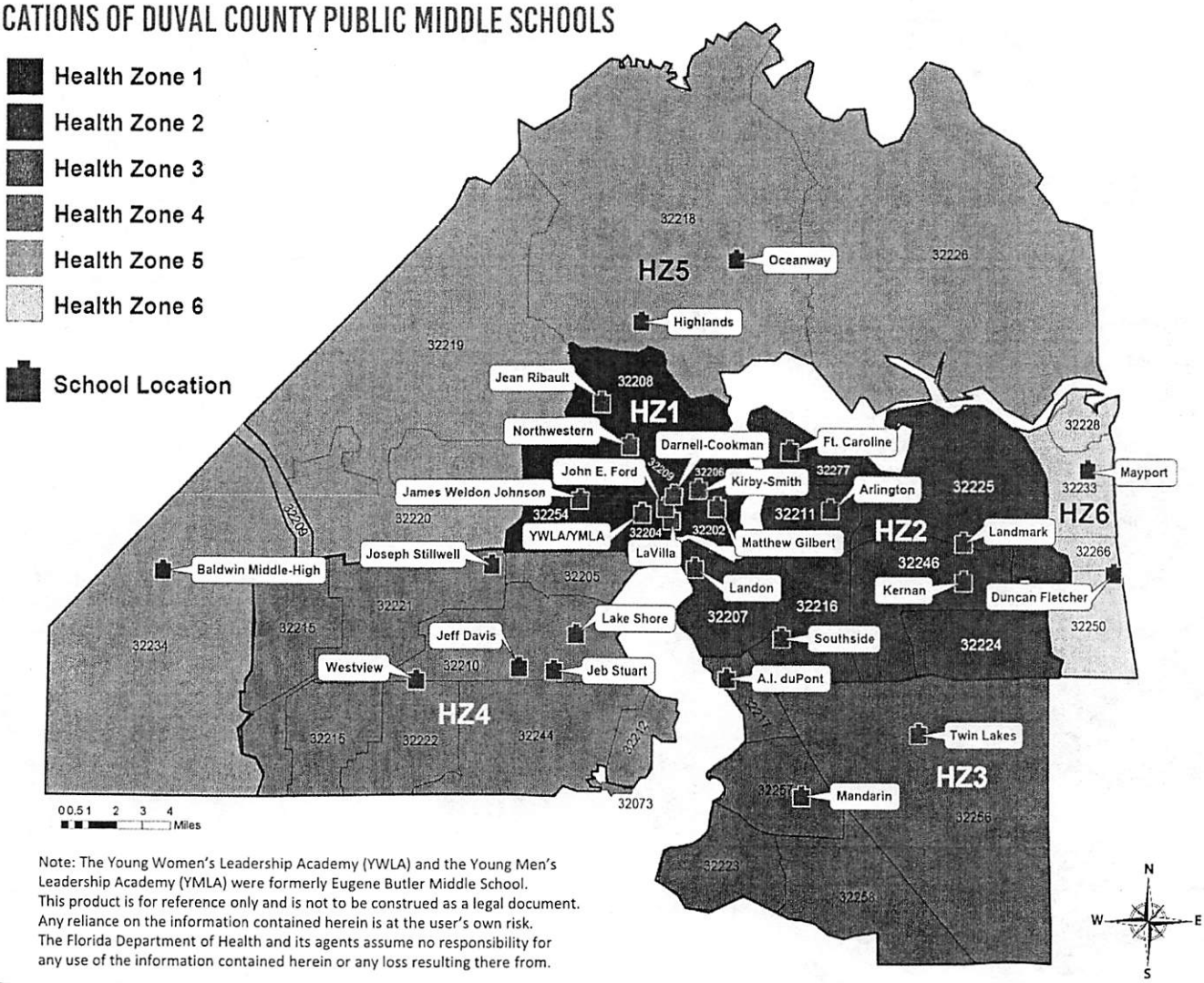


INTRODUCTION

The Youth Risk Behavior Survey (YRBS) is a self-administered, school-based, confidential, and anonymous survey that was conducted in Duval County Public Schools (DCPS) during the spring of 2009, 2011, 2013, 2015, and 2017. This is part of a national effort by the Centers for Disease Control and Prevention (CDC) to obtain information pertaining to youth health behaviors that contribute to the leading causes of death and disability among youth and adults. This report summarizes 2017 YRBS data on sexual behaviors among Duval County middle school students. In 2017, 4,633 students from 29 Duval County public middle schools participated in the YRBS.

Duval County is located on the northeast coast of Florida and is comprised of urban, suburban, and pockets of rural areas. The County is divided into six Health Zones (HZ) which differ in terms of demographics, socioeconomic factors, and health outcomes. The HZs are based on mutually exclusive zip codes tied to county organization and demographics. The HZ analysis of the YRBS data increases our understanding of differences in the geographic distribution of health-related behaviors in Duval County and can assist in planning targeted health interventions.

LOCATIONS OF DUVAL COUNTY PUBLIC MIDDLE SCHOOLS



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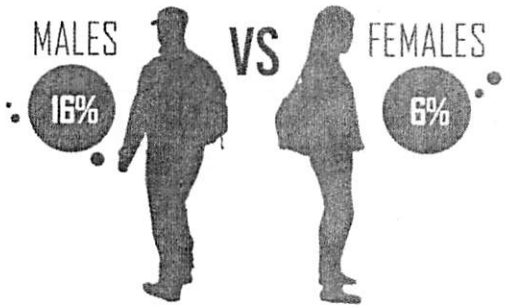
SEXUAL ACTIVITY AMONG DUVAL COUNTY MIDDLE SCHOOL STUDENTS CONTINUES TO DECLINE. IN 2017, AMONG DUVAL COUNTY MIDDLE SCHOOLS STUDENTS:

- About 1 in 9 students have ever had sex – a 25% decrease since 2013. Male students (16.3%) were more likely to have ever had sex than female students (5.8%).

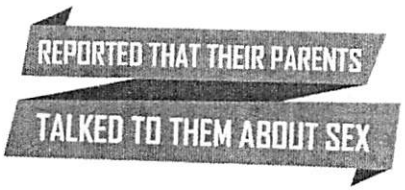


MALES WERE ABOUT
3 TIMES MORE LIKELY
TO HAVE EVER HAD SEX THAN FEMALES

- Among sexually active middle school students:
  - 4.3% had sex before age 11 – a 30% decrease from 2013. Male students (6.4%) were more likely to have had sex before age 11 than female students (1.9%).
  - 3.9% had 3 or more sexual partners during their lifetime – a 49% decrease from 2013. Male students (5.6%) were more likely to have had 3 or more sexual partners than female students (1.9%).
  - 3 in 5 used a condom the last time they had sex – an 8% decrease from 2013. Male students (64.1%) were more likely to use condoms than female students (48.3%).
- About 1 in 2 students reported that their parents or other adults in their family talked with them about expectations regarding sexual behavior.

FEWER DUVAL COUNTY MIDDLE SCHOOL STUDENTS REPORTED LEARNING ABOUT HIV/AIDS IN SCHOOL.

- The percent of Duval County middle school students that reported learning about HIV/AIDS in school decreased from 64.9% in 2013 to 58.6% in 2017 – a 10% decrease.



DOES TALKING ABOUT IT MAKE A DIFFERENCE?

Teens consistently report that trusted adults – not peers, partners, or popular culture – most influence their decisions about relationships and sex. Talking to teens about sex decreases their likelihood of engaging in risky sexual behaviors and increases the likelihood that they will use condoms.

IT'S NOT JUST ABOUT THE FACTS AND FIGURES.

When talking with youth about sex it is important to consider how you are communicating. Demonstrating acceptance, respect, and a lack of judgement is essential.
Suggested topics include:

- Healthy and respectful relationships
- Expectations about relationships and sex
- Information and resources on HIV, STDs, and pregnancy prevention

Communication is a learning process. Offering classes and support groups targeted towards helping parents develop communication skills is an effective way to reach youth.

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County
SEXUAL BEHAVIORS							
Ever had sexual intercourse	10.8%	12.6%	8.3%[6]	12.8%	13.0%	18.2%	11.0%[6]
Had sexual intercourse for the first time before age 11	4.3%	4.6%	2.4%	5.4%	3.1%	5.4%	4.3%
A revealing or sexual photo of them had been texted, e-mailed, or posted electronically without their permission*	4.0%	4.5%	1.5%	3.5%	5.8%[3]	6.1%[3]	4.3%[3]
Had sexual intercourse with 3 or more people during their life time	5.0%	4.2%	2.2%	3.2%	5.5%	5.4%	3.9%
Used a condom during last sexual intercourse**	56.6%	55.3%	59.8%	62.6%	53.2%	64.5%	60.1%
Were ever taught in school about AIDS or HIV infection	59.6%	62.9%	63.6%	58.2%	55.7%	65.1%	58.6%
Reported their parents or other adults in their family talked with them about expectations regarding sexual behavior	51.7%	50.0%	50.6%	51.1%	49.4%	53.9%	50.8%

Notes:
* = During the 30 days before the survey
** = During the last sexual intercourse among students who were sexually active

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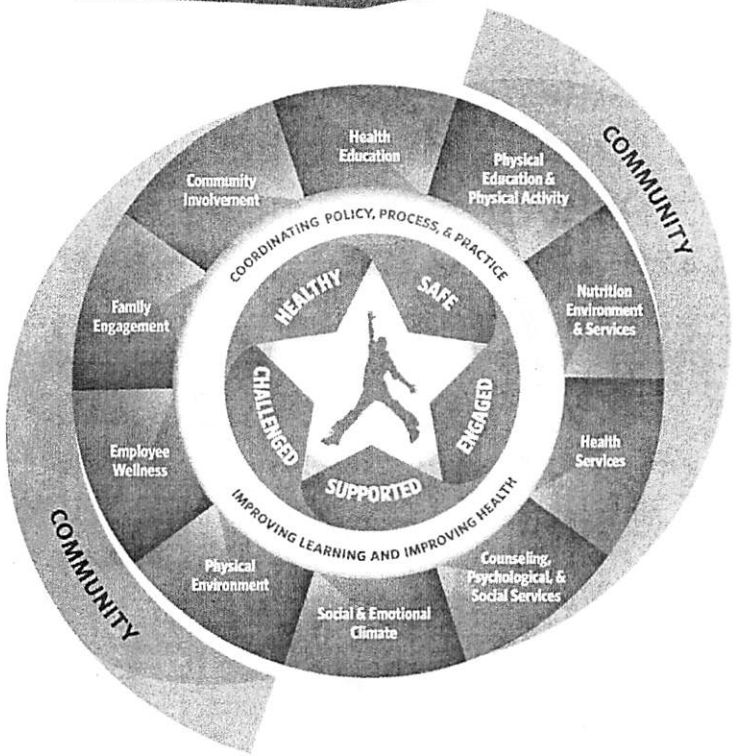


Using information from the CDC and other research-based initiatives the below content provides recommendations for continued progress in building healthy relationships and preventing sexual risk behaviors in Duval County.

EXEMPLARY SEXUAL HEALTH EDUCATION

Increasing the number of schools that provide sexual health education is a critical objective for improving youth outcomes.

Sexual health education should address:

- Healthy relationships
- Communication skills
- Condoms and other contraception methods
- Goal-setting and decision-making skills
- Preventative care
- How to access accurate and reliable health information
- Sexual orientation
- Gender roles, gender identity, and gender expression

SEXUAL HEALTH SERVICES

Sexual health services are most effective when they are easily accessible, accepting, and confidential. Schools can improve adolescents' access to key sexual health services via the provision of on-site services or referrals to adolescent-friendly providers in the community.

Sexual health services include:

- Sexual health education
- HIV and STD testing and treatment
- Contraceptive services
- Pregnancy testing
- Condom provision
- HPV vaccines
- Guidance and counseling services

SAFE AND SUPPORTIVE ENVIRONMENTS

Safe and supportive school environments are associated with improved education and health outcomes for all students.

Strategies for improvement:

- Develop a school environment free of bullying and sexual harassment
- Engage parents and students
- Partner with outside organizations to focus on safe school environments
- Implement positive youth-development programs, Gay-Straight Alliances, safe spaces, and visible allies

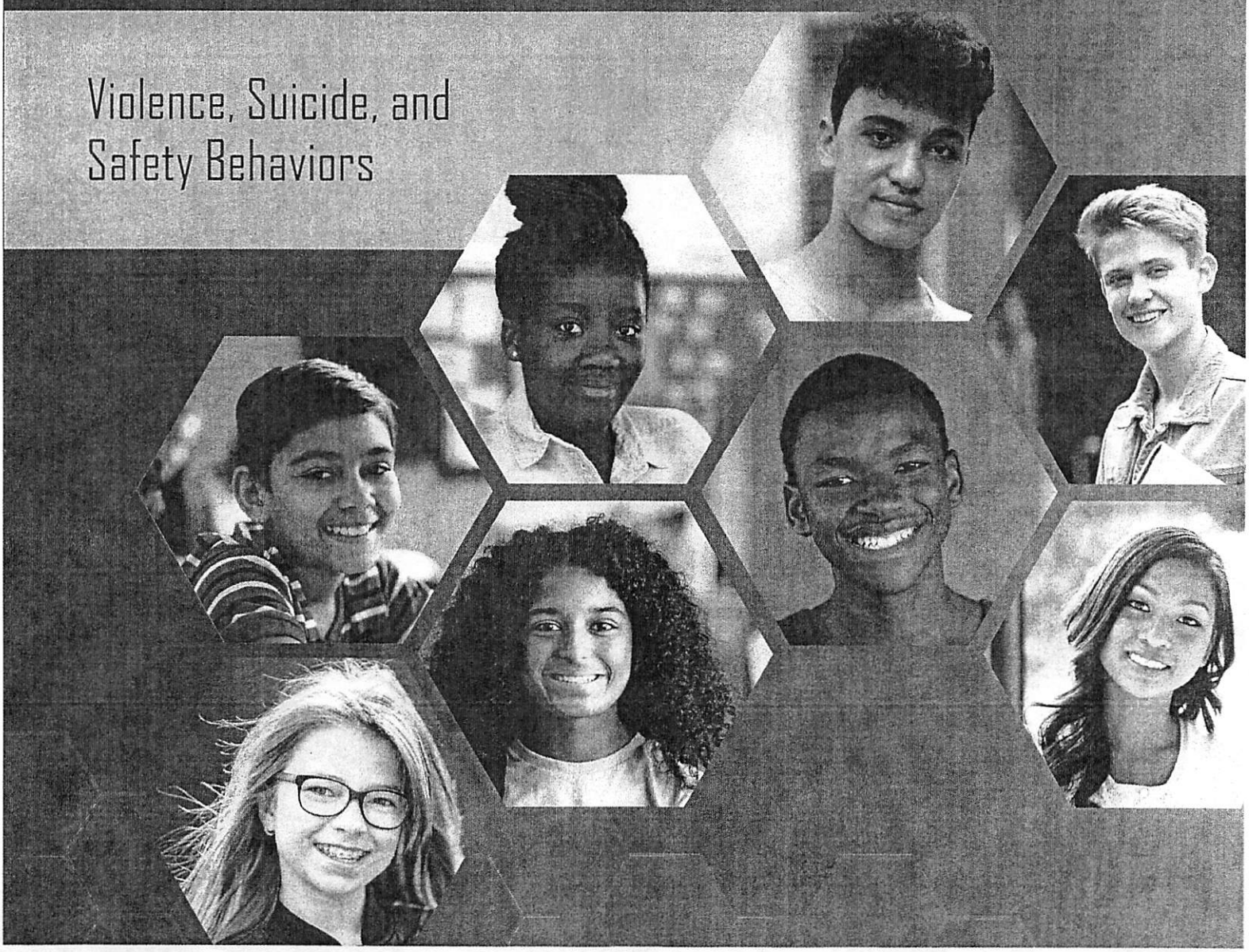
Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County Middle School Students, 2017

Violence, Suicide, and Safety Behaviors



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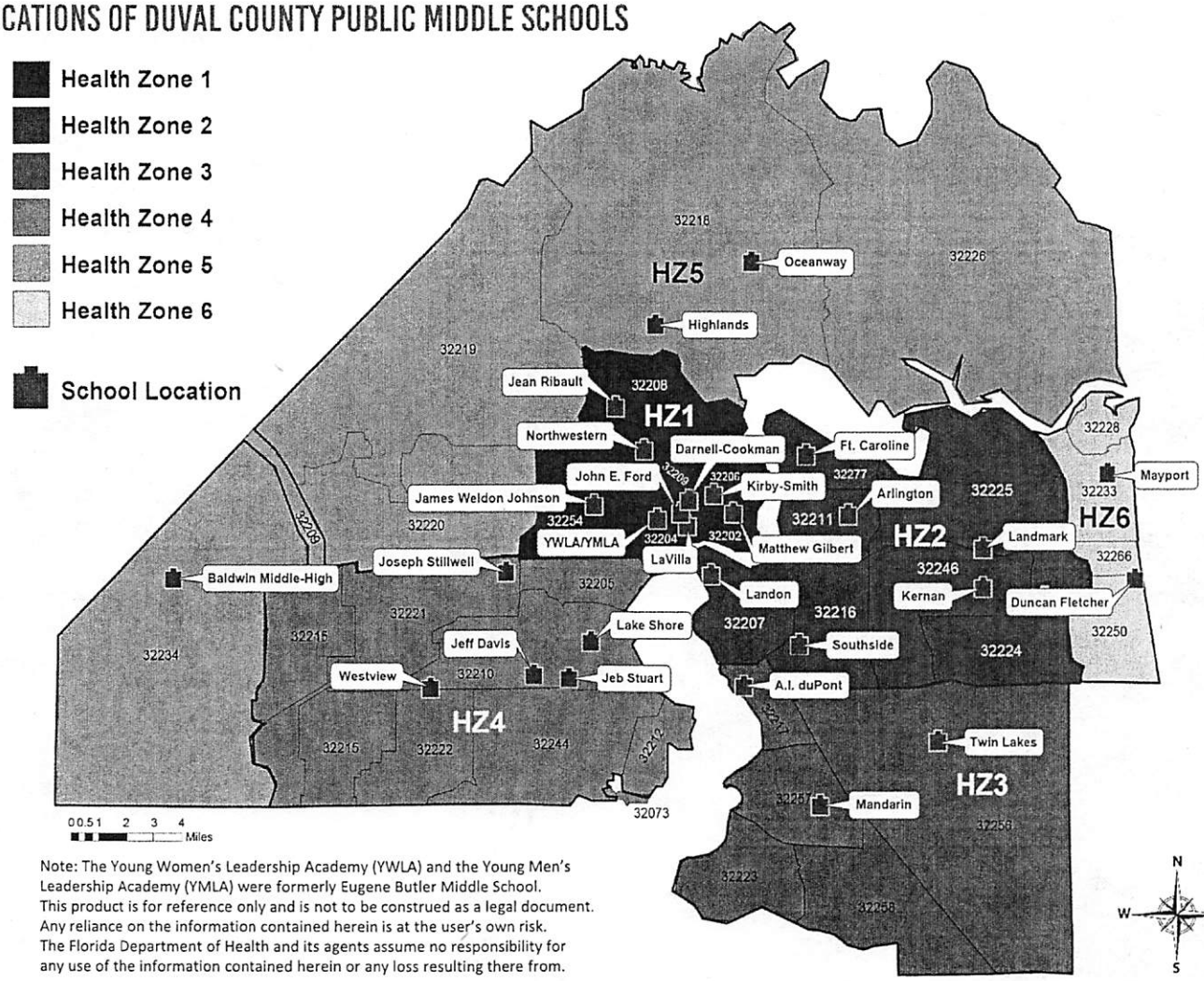

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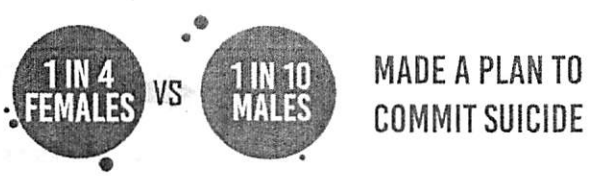
AMONG DUVAL COUNTY MIDDLE SCHOOL STUDENTS, SIGNIFICANT GAPS EXIST IN VIOLENCE-RELATED BEHAVIORS. IN 2017:

- About 3 in 10 students had been in a physical fight on school property during the 12 months before the survey. Male students (38.0%) were more likely to have been in a physical fight than female students (21.2%).
- About 1 in 3 students carried a weapon for protection during the 12 months before the survey. Male students (40.6%) were more likely to have carried a weapon for protection than female students (23.4%).
- Over 2 in 5 students reported that they have been bullied on school property – a 12% increase since 2013. Female students (49.9%) were more likely to have been bullied than male students (37.3%).
- Over 1 in 5 students have been bullied because someone thought that they were lesbian, gay, or bisexual (LGB).

FEMALE STUDENTS ARE AT HIGHER RISK FOR SUICIDE-RELATED BEHAVIORS THAN MALE STUDENTS. IN 2017, AMONG DUVAL COUNTY MIDDLE SCHOOL STUDENTS:

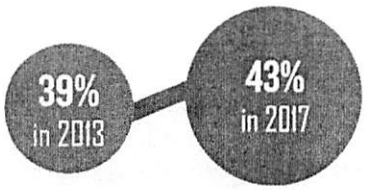
- About 1 in 4 students had seriously contemplated suicide. Female students (33.9%) were more likely to have thought about suicide than male students (18.2%).
- Close to 1 in 5 students had made a plan to attempt suicide – a 10% increase since 2013. Female students (25.4%) were more likely to have made a plan to commit suicide than male students (11.1%).
- About 1 in 8 students attempted suicide – a 21% increase since 2013. Female students (17.4%) were more likely to have attempted suicide than male students (8.4%).



WHAT IS BULLYING?

Bullying is a form of violence. The CDC defines bullying as any unwanted aggressive behavior by another person or group of people that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated. Bullying can include aggression that is physical, verbal, or relational.

PERCENTAGE OF STUDENTS BULLIED ON SCHOOL PROPERTY INCREASED



WHAT IS CYBERBULLYING?

Cyberbullying is bullying that takes place over digital devices. It is possible for cyberbullying to cross the line into criminal behavior, such as the sharing of illicit photos.

TEENS WHO ARE BULLIED ARE AT HIGHER RISK FOR:

- Physical injury
- Depression and anxiety
- Substance use
- Sleep issues
- Health complaints
- Academic problems
- Suicide

TEENS WHO BULLY OTHERS ARE AT HIGHER RISK FOR:

- Substance use
- Academic problems
- Violence throughout adolescence and into adulthood

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County
VIOLENCE							
Ever carried a weapon	34.2%	33.9%	27.9%	32.4%	31.7%	37.2%	32.3%
Were in a physical fight on school property*	28.5%	30.7%	25.8%	29.1%	29.9%	34.5%	29.9%
BULLYING							
Ever been bullied on school property	46.2%	44.4%	42.2%	43.9%	42.2%	46.3%	43.4%
Ever been electronically bullied	20.7%	22.9%	18.3%	22.1%	18.9%	23.8%	20.3%
Were the victim of teasing or name calling because someone thought that they were lesbian, gay, or bisexual	18.9%	24.6%	22.0%	23.7%	21.8%	22.7%	22.6%
A revealing or sexual photo of them had been texted, e-mailed, or posted electronically without their permission	4.0%	4.5%	1.5%	3.5%	5.8%[3]	6.1%[3]	4.3%[3]
SUICIDE							
Ever seriously thought about killing themselves	27.0%	28.8%	27.8%	30.8%	32.7%	28.6%	25.9%
Ever made a plan about how they would kill themselves	19.9%	20.4%	19.2%	22.0%	18.7%	21.7%	18.2%
Ever tried to kill themselves	16.0%	13.2%	13.7%	15.6%	14.3%	16.8%	12.8%
SAFETY BEHAVIORS							
Never or rarely wore seat belt	5.7%	10.1%	8.6%	11.2%	10.9%	9.7%	9.8%
Ever rode in a car driven by someone who had been drinking alcohol	23.0%	26.0%	18.5%	26.4%	24.0%	27.3%	23.0%

Notes:
Weapon = A gun, knife, or club * = During the 12 months before the survey

For some indicators the data for Duval County is lower than the data for all health zones. This is due to missing data at the health zone level.

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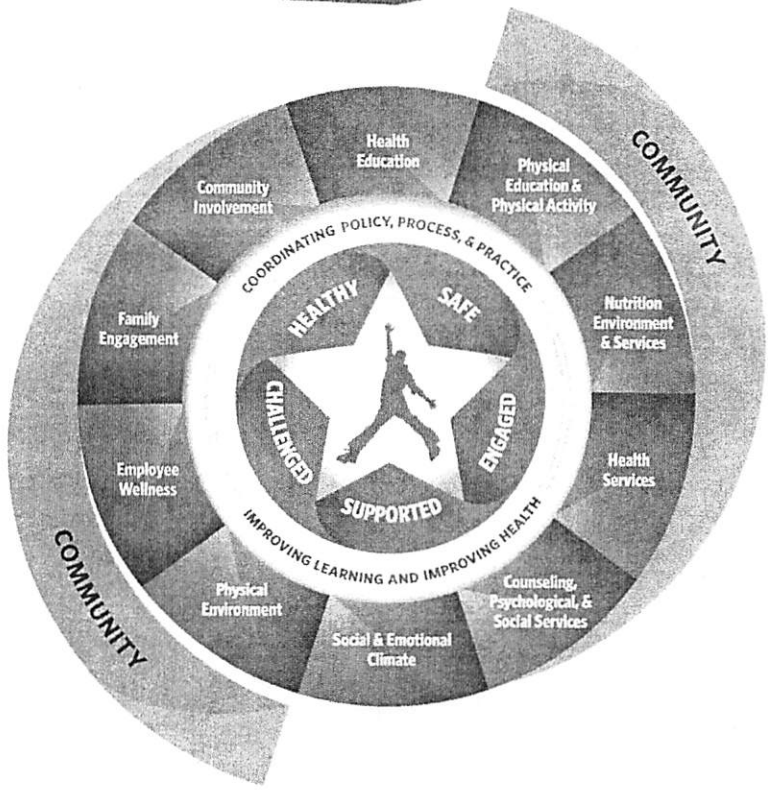


Using information from the CDC and other research-based initiatives the below content provides recommendations for continued progress in addressing bullying and other issues related to student safety in Duval County.

Multifaceted programs that address prevalent issues result in programs that are more meaningful for the community, as well as more cost effective.

Tailor programs to address risks and enhance strengths in a community	Using HZ data, interventions can be developed that address specific risks, such as bullying, that are present in a community. Evidence-based programs can also be tailored to more effectively address the needs of a community. Consider which groups are most affected, where the behavior is taking place, what type of behavior is happening, and what is currently being done.
Develop strategic partnerships	No one person (e.g., parent, teacher, mentor) can implement suicide prevention efforts on their own. Build strategic partnerships between anti-bullying groups and those who have direct contact with youth (e.g., coaches, teachers). Adults who supervise a young person can help prevent suicide by knowing the risk factors and warning signs, asking youth that they are concerned about if he/she has been thinking about suicide, and providing timely referrals to community resources.
Support and empower youth	Involvement in violence – even as a witness – can have serious and long lasting consequences for youth. Provide support and referrals for all youth involved and include their families. Empower youth by providing concrete, positive ways that they can influence the social norms of their peer group. Provide training to youth on safe and effective actions that they can use when they are concerned about a peer or witness a peer being bullied.

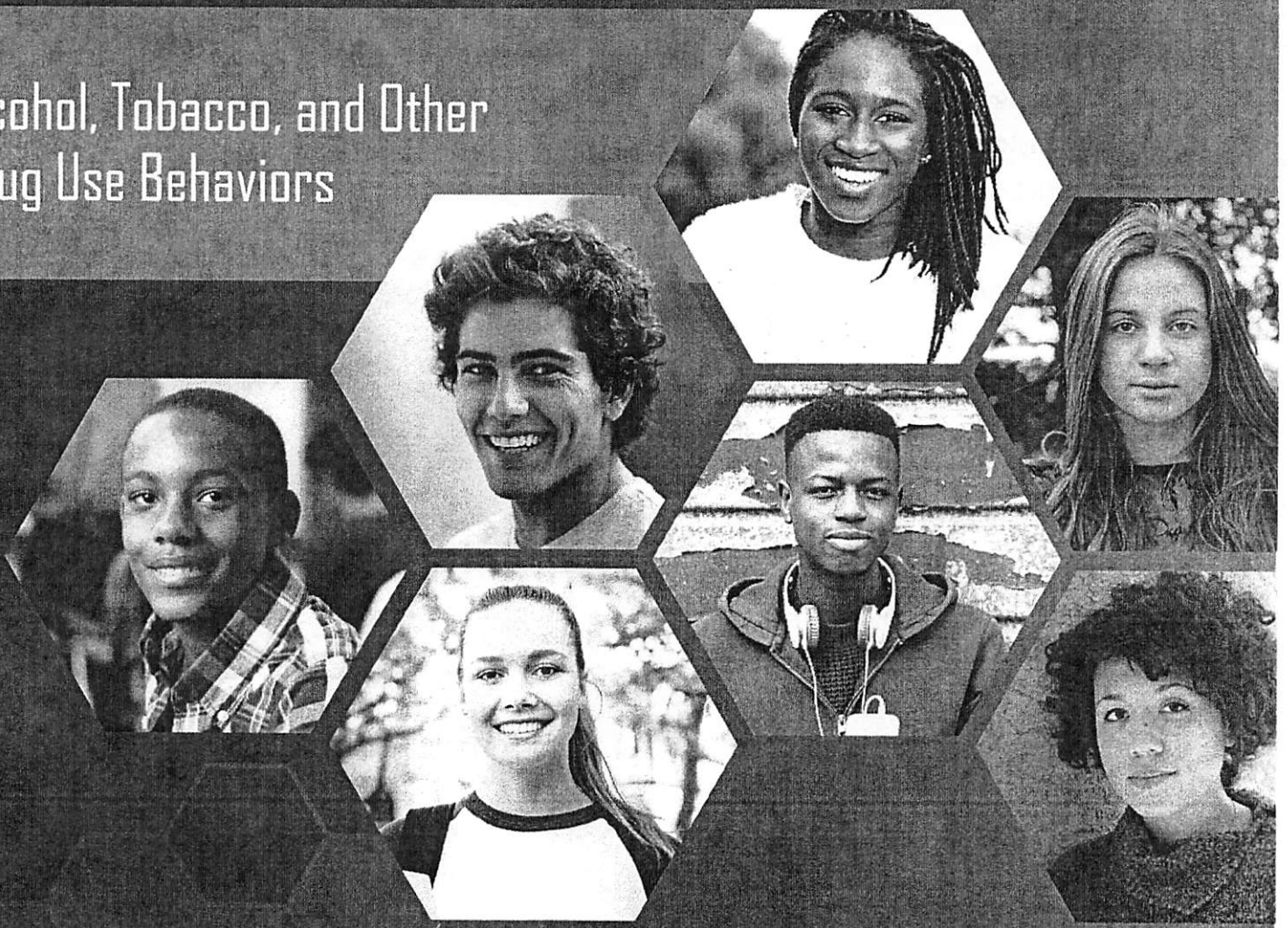
Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County High School Students, 2017

Alcohol, Tobacco, and Other Drug Use Behaviors



INTRODUCTION

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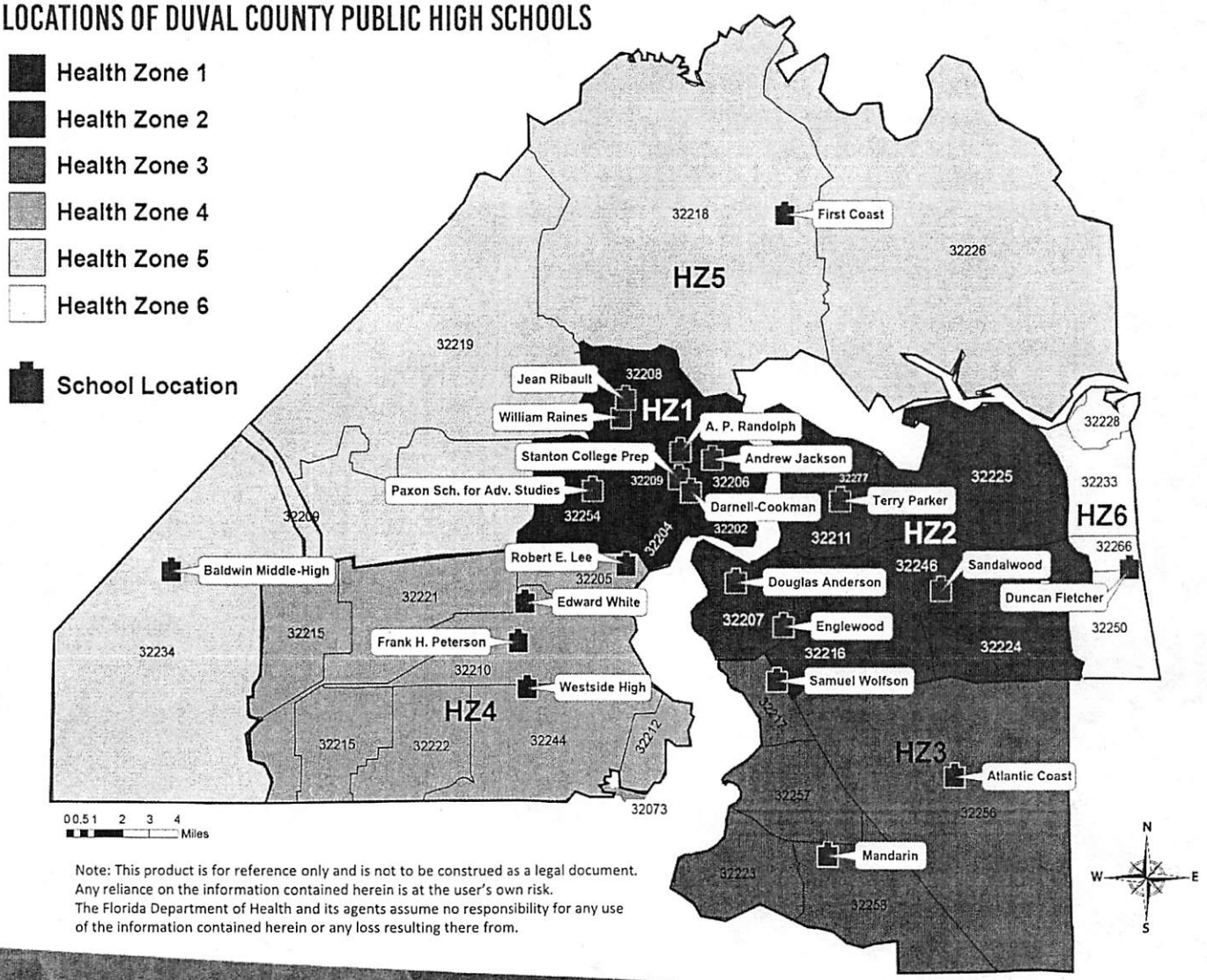
LOCATIONS OF DUVAL COUNTY PUBLIC HIGH SCHOOLS



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ALCOHOL CONSUMPTION AMONG DUVAL COUNTY HIGH SCHOOL STUDENTS CONTINUES TO DECLINE.

Duval County has seen a consistent decrease in alcohol consumption among high school students since 2011.

- Lifetime alcohol use decreased from 65.2% in 2011 to 53.3% in 2017 – an 18% decrease.
- Current alcohol use decreased from 35.6% in 2011 to 24.9% in 2017 – a 27% decrease.

Despite declining rates, a large number of students still drink. In 2017, among Duval County high school students:

- Over half of students reported trying alcohol at least once in their lifetime.
- 1 in 4 students reported alcohol use in the past 30 days.
- Current alcohol use was more common among female students (28.3%) than male students (22.6%) and more common among lesbian, gay, and bisexual (LGB) students (40.5%) than heterosexual students (22.8%).
- 1 in 7 students attended school under the influence of alcohol or another illegal drug.

SUBSTANCE USE RISK FACTORS:

- Parents who use drugs and alcohol or who suffer from mental illness
- Substance use among peers
- Experiencing child abuse or maltreatment
- Neighborhood violence or poverty
- Norms and laws that are favorable to substance use

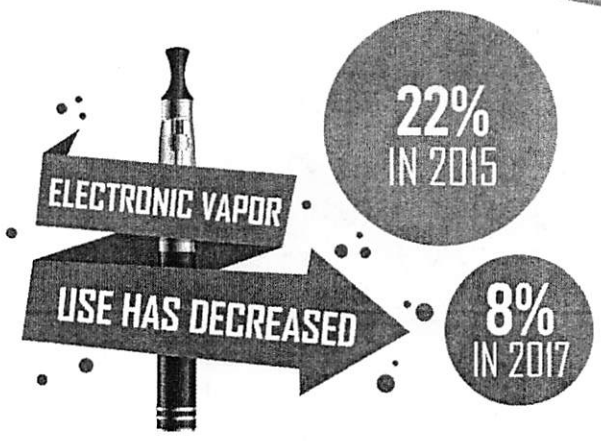
SUBSTANCE USE PROTECTIVE FACTORS:

- Good coping and problem solving skills
- Parental involvement
- Presence of mentors
- School connectedness
- Faith-based resources and after-school activities
- Laws limiting the availability of tobacco and alcohol

Nationally, youth who start drinking before age 15 are six times more likely to develop alcohol dependency than those who start at or after age 21.

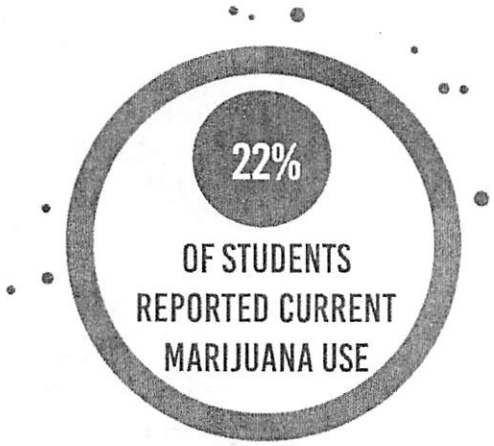
TOBACCO USE AMONG ADOLESCENTS CONTINUES TO DECLINE AMONG DUVAL COUNTY HIGH SCHOOL STUDENTS.

- Current cigarette use decreased from 12.4% in 2011 to 5.1% in 2017 – a 59% decrease.
- Lifetime electronic vapor product use decreased from 44.3% in 2015 to 37.4% in 2017 – a 16% decrease.
- Current electronic vapor product use decreased from 22.1% in 2015 to 7.8% in 2017 – a 65% decrease.



USE OF ILLEGAL SUBSTANCES REMAINS A CHALLENGE AMONG DUVAL COUNTY HIGH SCHOOL STUDENTS. IN 2017:

- Close to 1 in 4 Duval County high school students reported current marijuana use. HZ 2 (26.3%) had the highest percent of students that currently used marijuana.

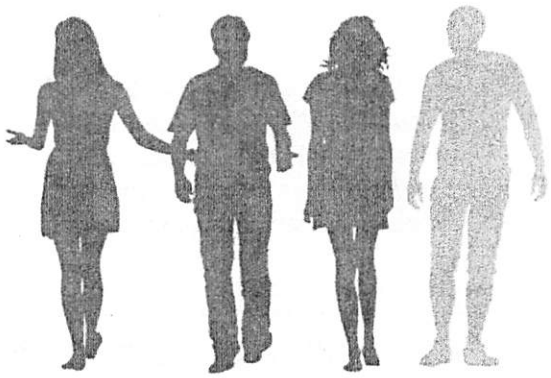


- Close to 1 in 20 Duval County high school students have used methamphetamines at least once in their lifetime.
  - Male students (6.9%) were over twice as likely to have used methamphetamines at least once in their lifetime than female students (3.1%).
  - Students in HZ 2 (8.4%) were more likely than Duval County students (4.9%) to have used methamphetamines at least once in their lifetime.
- Over 1 in 8 Duval County high school students reported current use of prescription drugs without a doctor's prescription.
  - Duval County (17.2%) high school students were more likely to use prescription drugs without a prescription when compared to Florida (11.2%).
- Duval County (27.4%) high school students were more likely to have been offered, sold, or given an illegal drug by someone on school property when compared to Florida (17.0%).

WERE OFFERED, SOLD, OR GIVEN AN ILLEGAL DRUG ON SCHOOL PROPERTY

CONSEQUENCES OF SUBSTANCE USE IN YOUTH INCLUDE INCREASED RISK FOR:

- School problems, such as absenteeism and poor grades
- Social problems, such as fighting and lack of participation in youth activities
- Legal problems
- Unwanted, unplanned, and unprotected sexual activity
- Physical and sexual assault
- Suicide or homicide
- Alcohol-related car crashes and other unintentional injuries
- Changes in brain development that may have life-long effects



NATIONALLY, AS MANY AS

75% of ADOLESCENTS

WITH SUBSTANCE ABUSE DISORDERS HAVE CO-OCCURING MENTAL ILLNESS

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County	FL
TOBACCO								
Current cigarette use*	7.1%	8.8%	4.7%	3.5%	5.3%	7.8%	6.1%	5.7%
Lifetime electronic vapor product use	41.4%	38.3%	32.2%	36.9%	37.3%	41.0%	37.4%	QNA
Current electronic vapor product use*	10.1%	10.1%[5]	7.0%	6.5%	3.9%	9.5%	7.8%[5]	QNA
ALCOHOL								
Lifetime alcohol use	55.2%	54.0%	57.4%	49.8%	55.4%	53.8%	53.3%	56.5%
Current alcohol use*	24.4%	26.3%	26.3%	19.8%[6,F]	25.6%	33.0%	24.9%	27.0%
OTHER DRUG USE BEHAVIORS								
Current marijuana use*	21.1%	26.3%[F]	18.7%	19.8%	23.7%	24.2%	22.4%	20.2%
Lifetime prescription drug use without a doctor's prescription	13.9%[2]	22.9%[F]	16.3%[F]	14.2%[2]	14.3%[2]	19.6%[F]	17.2%[2,F]	11.2%
Lifetime marijuana use	39.7%	38.9%	36.6%	38.4%	39.2%	35.6%	39.6%	34.5%
Lifetime synthetic marijuana use	5.8%	9.8%	4.9%	5.1%	6.9%	8.0%	6.9%	QNA
Lifetime inhalant use	13.5%	13.4%	8.9%	9.0%	10.5%	11.9%	11.2%	QNA
Lifetime cocaine use	8.3%	10.3%	3.8%[2]	4.1%[2]	4.1%[2]	8.3%	6.6%	4.7%
Lifetime ecstasy use	8.8%	12.1%	4.6%[2]	3.9%[2]	6.9%	7.7%	7.6%	QNA
Lifetime methamphetamine use	6.7%[4]	8.4%	2.9%[2]	2.1%[2]	3.3%[2]	4.9%	4.9%[2,4]	QNA
Offered, sold, or given an illegal drug by someone on school property**	27.4%	30.2%	23.9%	25.1%	27.7%	32.1%	27.4%	17.0%[1-6,D]
Attended school under the influence of alcohol or other illegal drugs**	13.6%	18.4%	12.5%	15.7%	15.2%	16.4%	15.6%	QNA

Notes:
QNA = Question not asked * = During the 30 days before the survey ** = During the 12 months before the survey
Electronic vapor products = Includes e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, and e-hookahs
Inhalants = Includes sniffing glue, breathing contents of aerosol spray cans, and inhaling paints or sprays to get high
Synthetics = Includes K2, Spice, fake weed, King Kong, Yucatan Fire, and Moon Rocks

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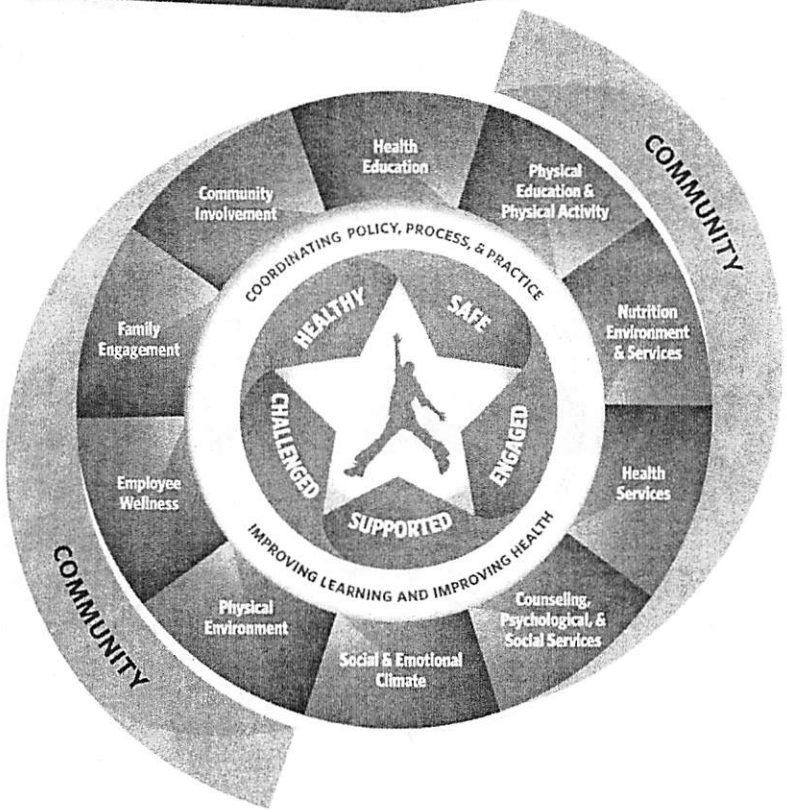
Comparisons by County and State are provided by the CDC (See YRBS methodology at www.CDC.gov). Comparisons by Health Zone are provided by the Florida Department of Health in Duval County.

DUVAL COUNTY, 2017

The CDC recommends a holistic approach to improving health behaviors and outcomes among youth. The Whole School, Whole Community, Whole Child (WSCC) model emphasizes that schools, health agencies, parents, and communities share a common goal of supporting health and academic achievement in adolescents. The WSCC model focuses its attention on the child, emphasizes a school-wide approach, and acknowledges learning, health, and the school as being a part of the local community. Importantly, the WSCC model provides a framework for how various sectors can work together to ensure that *every young person* is healthy, safe, engaged, supported, and challenged. This approach is illustrated in the image to the right.



Using information from the CDC and other research-based initiatives, the table below provides recommendations for addressing alcohol, tobacco, and other substance use issues among youth.

Multifaceted programs that address prevalent issues result in programs that are more meaningful for the community, as well as more cost effective.

Implement school-based prevention programs	Programs focused on increasing academic and social competency in schools can support students by building skills related to good study habits, effective communication, relationship building, self-efficacy and assertiveness, and drug resistance.
Tailor programs to address risks and enhance strengths in a community	Using HZ data, interventions can be developed that address specific risks, such as use of a specific drug, that are most prevalent in a community. Evidence-based programs can also be tailored to more effectively address the needs of a community.
Target key transitional points	Rather than focusing only on identified at-risk populations, programs can be developed to target key transitional points in adolescent life (e.g., the transition from elementary school to middle school). This approach helps to remove labeling and stigma and promote bonding to the school and community.
Target co-occurring risk behaviors	Many health behaviors, such as substance use and sexual risk behaviors, share common underlying factors and tend to co-occur. Evidence-based prevention strategies that are most effective are those that address co-occurring risk behaviors.

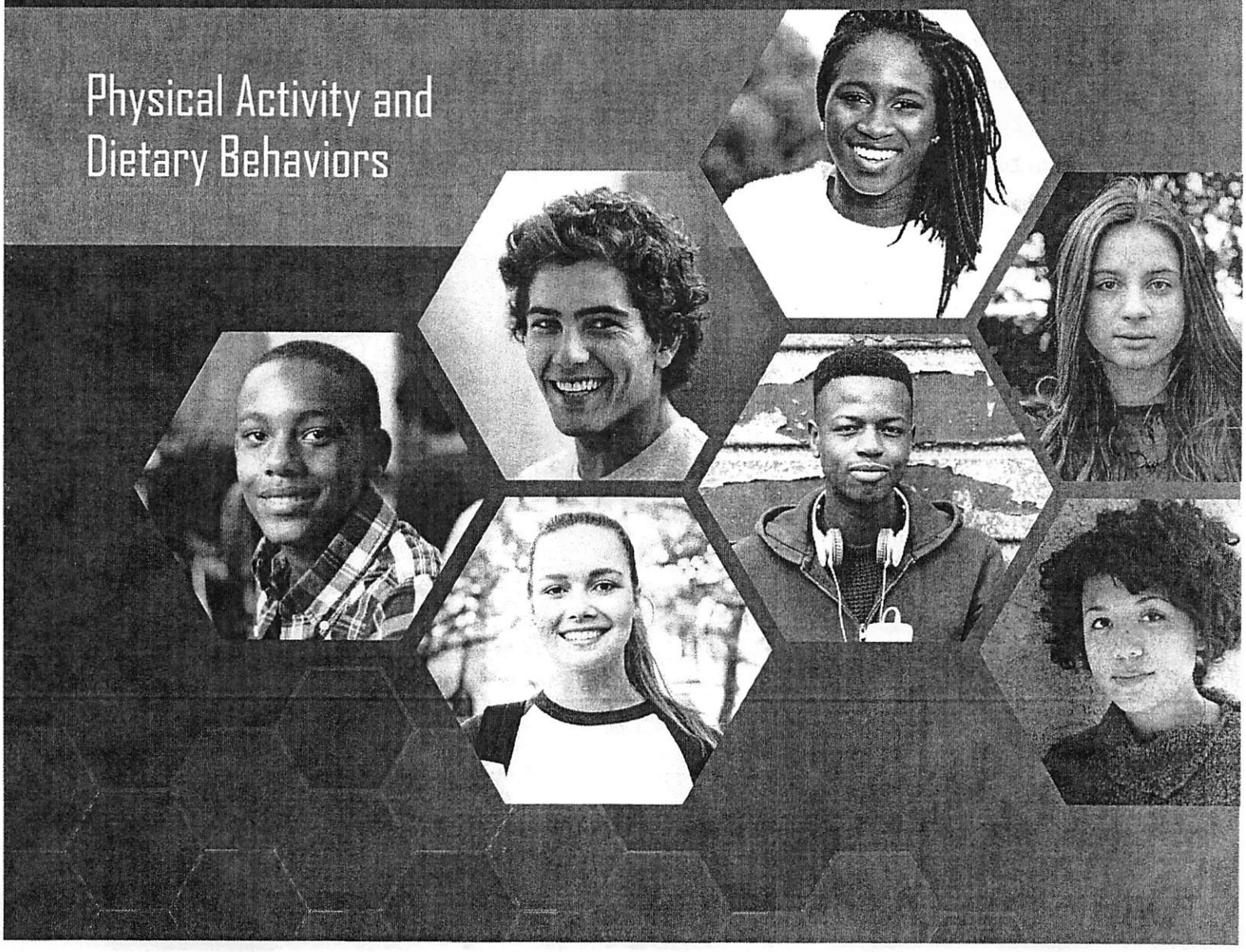
Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County High School Students, 2017

Physical Activity and Dietary Behaviors



INTRODUCTION

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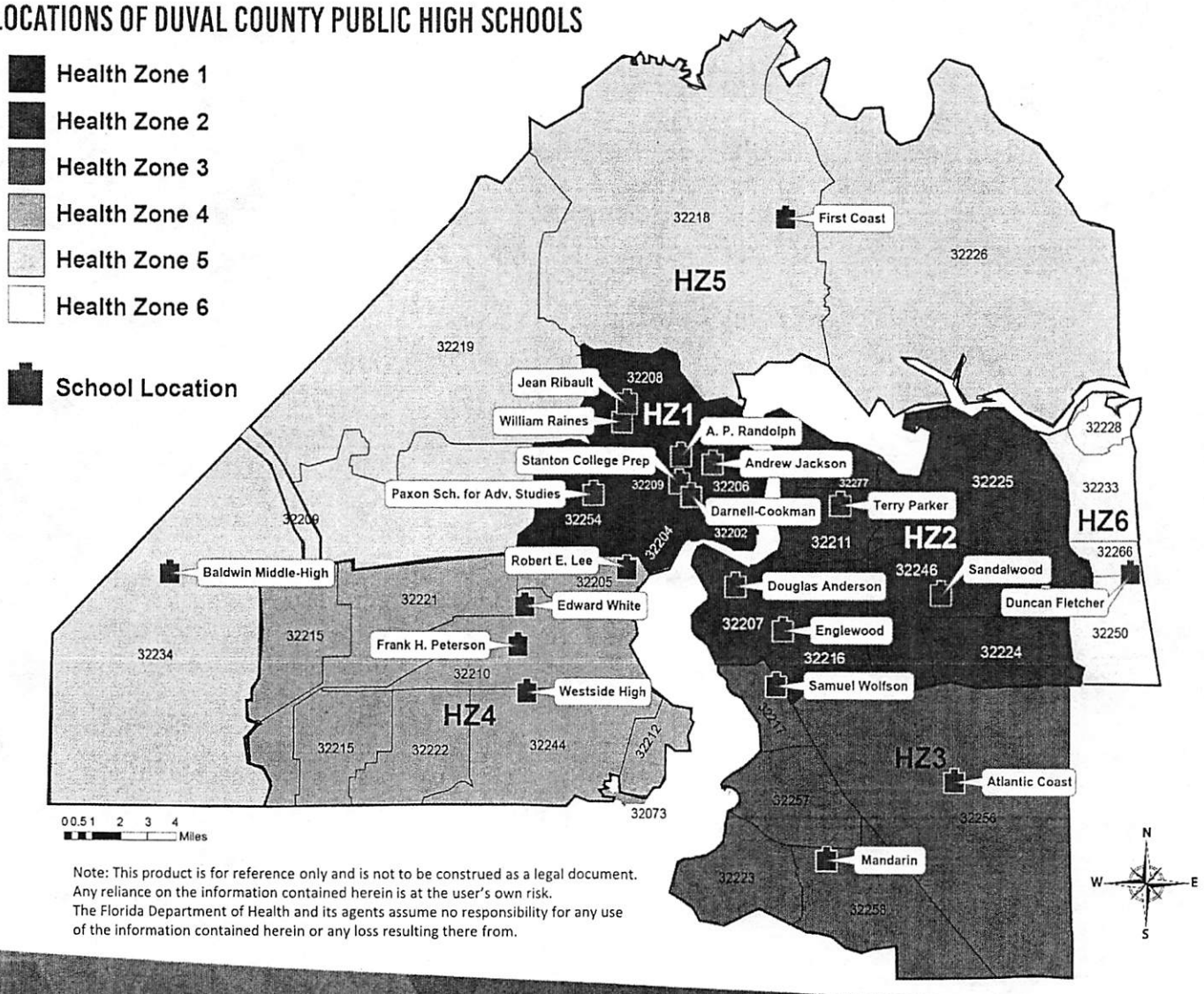
LOCATIONS OF DUVAL COUNTY PUBLIC HIGH SCHOOLS



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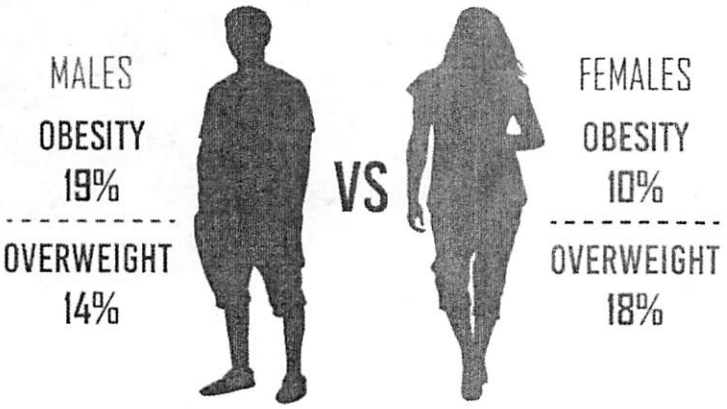
MORE DUVAL COUNTY HIGH SCHOOL STUDENTS WERE OBESE COMPARED TO FLORIDA. IN 2017:

- About 1 in 7 Duval County high school students were obese compared to 1 in 10 Florida students. More male students (18.7%) in Duval County were obese than female students (10.3%).
  - In Duval County, HZ 2 (15.3%) and HZ 5 (17.7%) had the highest rates of obesity.
- About 1 in 7 Duval County high school students were overweight. More female students (17.8%) were overweight than male students (13.6%).



- Over 1 in 4 Duval County students were teased for their weight or appearance.
- About 2 in 7 Duval County students have been told by a doctor that they have asthma.
  - Male students (30.5%) are more likely to have been told that they have asthma than female students (24.3%).

OBESITY IS A COMPLEX HEALTH ISSUE.

Childhood obesity is linked to many physical, social, and psychological risks including:

- High blood pressure and high cholesterol
- Glucose tolerance, insulin resistance, and type 2 diabetes
- Breathing problems
- Anxiety and depression
- Low self-esteem and self-reported quality of life
- Bullying and associated stigma

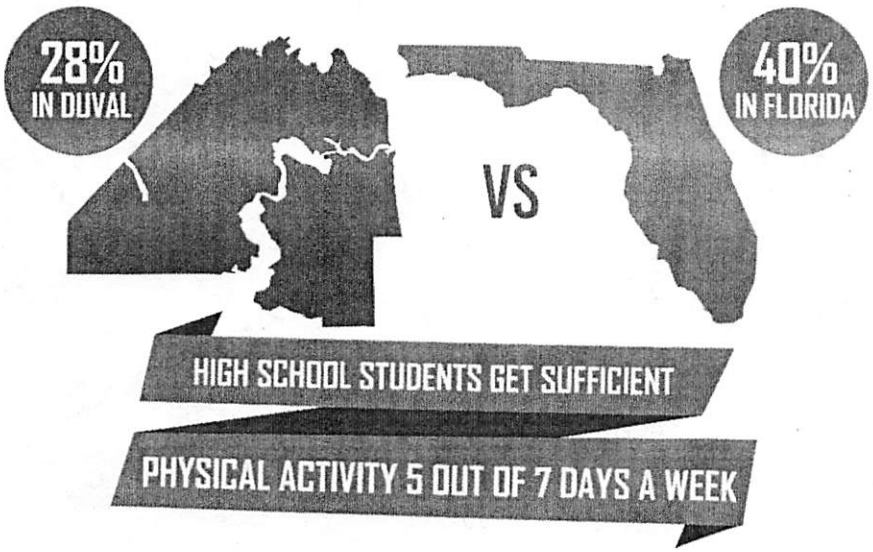
HOW CAN SCHOOLS HELP YOUTH BE MORE PHYSICALLY ACTIVE?

- Have policies that provide time for organized physical activity and free play
- Support walk- and bike-to-school programs
- Provide information to parents about the benefits of physical activity
- Encourage staff to be active

BENEFITS OF PHYSICAL ACTIVITY.

The CDC recommends that children and adolescents have at least 60 minutes of physical activity each day. Regular physical activity can help adolescents:

- Build strong bones and muscles
- Improve cardiorespiratory fitness
- Control weight
- Reduce symptoms of depression and anxiety
- Reduce the risk of developing health conditions such as: high blood pressure, type 2 diabetes, heart disease, cancer, and obesity



PHYSICAL ACTIVITY AND HEALTHY EATING HAS NOT IMPROVED AMONG DUVAL COUNTY HIGH SCHOOL STUDENTS. IN 2017:

- Only 2 in 7 students were sufficiently physically active – a 15% decrease since 2013.
  - Male students (34.1%) were more likely to have sufficient physical activity than female students (22.6%).
- About 3 in 7 high school students played video/computer games for three or more hours per day – a 12% increase from 2013.
- About 2 in 7 high students ate at least one meal or snack from a fast food restaurant in the week before the survey.
  - In HZ 5, 1 in 3 students ate at least one meal at a fast food restaurant in the week before the survey.
- Fewer high school students in Duval County (17.8%) ate fruit or drank 100% fruit juice three or more times per day when compared to Florida (20.0%).
- Fewer high school students in Duval County (12.3%) ate vegetables three or more times per day when compared to Florida (14.7%).

ALL COMMUNITIES DESERVE ACCESS TO HEALTHY FOODS AND SAFE PLACES TO BE PHYSICALLY ACTIVE.

Our ability to be physically active and eat nutritious foods is largely determined by the places in which we live, work, learn, and play.

The CDC recommends that communities form cross-sector partnerships that:

- Increase access to parks, athletic facilities, and recreation areas, especially in low-income communities
- Increase access to gyms, ball fields, and other recreation areas through joint-use agreements
- Use crime prevention and traffic safety measures to create safe environments that encourage physical activity
- Increase the number of school and community gardens
- Expand healthy food offerings at corner stores

STUDENTS ATE AT LEAST ONE MEAL OR SNACK FROM A FAST FOOD RESTAURANT IN THE PAST WEEK

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County	FL
PHYSICAL ACTIVITY								
Were physically active at least 60 minutes per day on 5 or more days**	27.2%	25.6%[6]	29.5%	30.5%	25.8%[6]	36.7%	28.3%[6]	39.3%[1-5, D]
Watched TV 3 or more hours per day***	29.0%	23.9%	23.4%	21.7%	22.4%	20.4%	23.6%	23.3%
Played video or computer games or used a computer 3 or more hours per day for something that was not school work**	46.0%	42.6%	47.4%[6]	43.5%	41.4%	35.8%	43.4%	45.3%
Played on at least one sports team*	43.4%	47.4%	40.4%[5]	48.2%	50.8%	48.9%	46.5%	46.8%
DIETARY BEHAVIORS								
Ate at least 1 meal or snack from a fast food restaurant**	30.2%	27.0%	24.2%[5]	29.7%	33.7%	28.0%	28.6%	29.0%
Drank 3 or more glasses of water per day**	43.4%	39.7%	48.2%	35.8%[3]	37.1%	43.4%	40.5%[3]	QNA
Ate fruit or drank 100% fruit juices three or more times per day**	16.5%	18.4%	15.6%	16.8%	21.6%	17.5%	17.8%	20.0%
Ate vegetables three or more times per day**	16.3%	13.6%	12.9%	9.4%	9.6%	12.6%	12.3%	14.7%[4,5]
OBESITY AND BODY IMAGE								
Were obese	13.3%	15.3%	12.4%	13.8%	17.7%	9.8%	14.2%	10.9%[2, 5, D]
Were overweight	15.8%	15.6%	13.8%	14.4%	14.5%	12.4%	14.7%	14.2%
Described themselves as slightly or very overweight	30.2%	29.6%	27.6%	26.9%	28.2%	25.9%	28.3%	29.9%
OTHER HEALTH-RELATED FACTORS								
Lifetime asthma	26.6%	25.5%	26.8%	27.2%	27.6%	29.3%	26.8%	22.2%[6,D]
Had 8 or more hours of sleep***	16.0%	14.2%	16.2%	15.4%	18.6%	19.3%	16.0%	21.1%[2, 4, D]
Had a sunburn*	38.1%[6]	44.4%[6]	47.1%[4,6]	36.6%[6]	43.1%[6]	60.4%	43.1%[6]	QNA
Saw a dentist*	67.4%	65.8%	67.0%	69.1%	64.6%	73.7%	67.3%	66.5%

Notes:
QNA = not asked
* = During the 12 months before the survey ** During the 7 days before the survey *** = On an average school day

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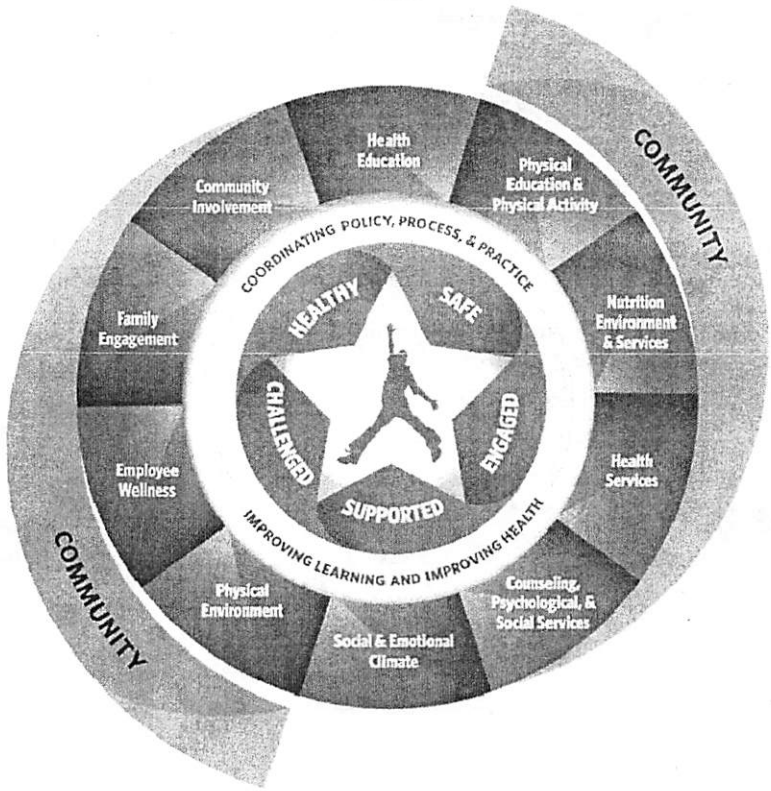

Using information from the CDC and other research-based initiatives the below content provides recommendations for continued progress in supporting an active and healthy lifestyle in Duval County.

INTERVENTION STRATEGIES

Get parents involved to encourage active behavior. Family fitness can help increase family connectedness, manage weight, reduce risk for chronic conditions, and boost academic performance.

Provide the means necessary for youth to be physically active on a daily basis. Building sidewalks and bike lanes and improving neighborhood safety can play a major role in increasing physical activity.

Encourage personal goals. Teens are more likely to engage in behaviors, such as physical activity and healthy eating, when they set their own personal goals. Short-term goals that involve specific, daily behaviors are more likely to lead to behavior change.

Improve the availability and affordability of public transportation to increase access to healthy food options. Expanding public transportation also increases physical activity, as most users walk or bicycle to access public transportation.

School staff can be positive role models for students by being physically active in and out of school. Staff members can support recess, clubs, intramural programs, and other physical activity offerings.

Help find safe places for youth to be physically active. Promote safe routes to walk or bike to school. Encourage community organizations to offer physical activity programs for youth.

Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County High School Students, 2017

Sexual Behaviors

INTRODUCTION

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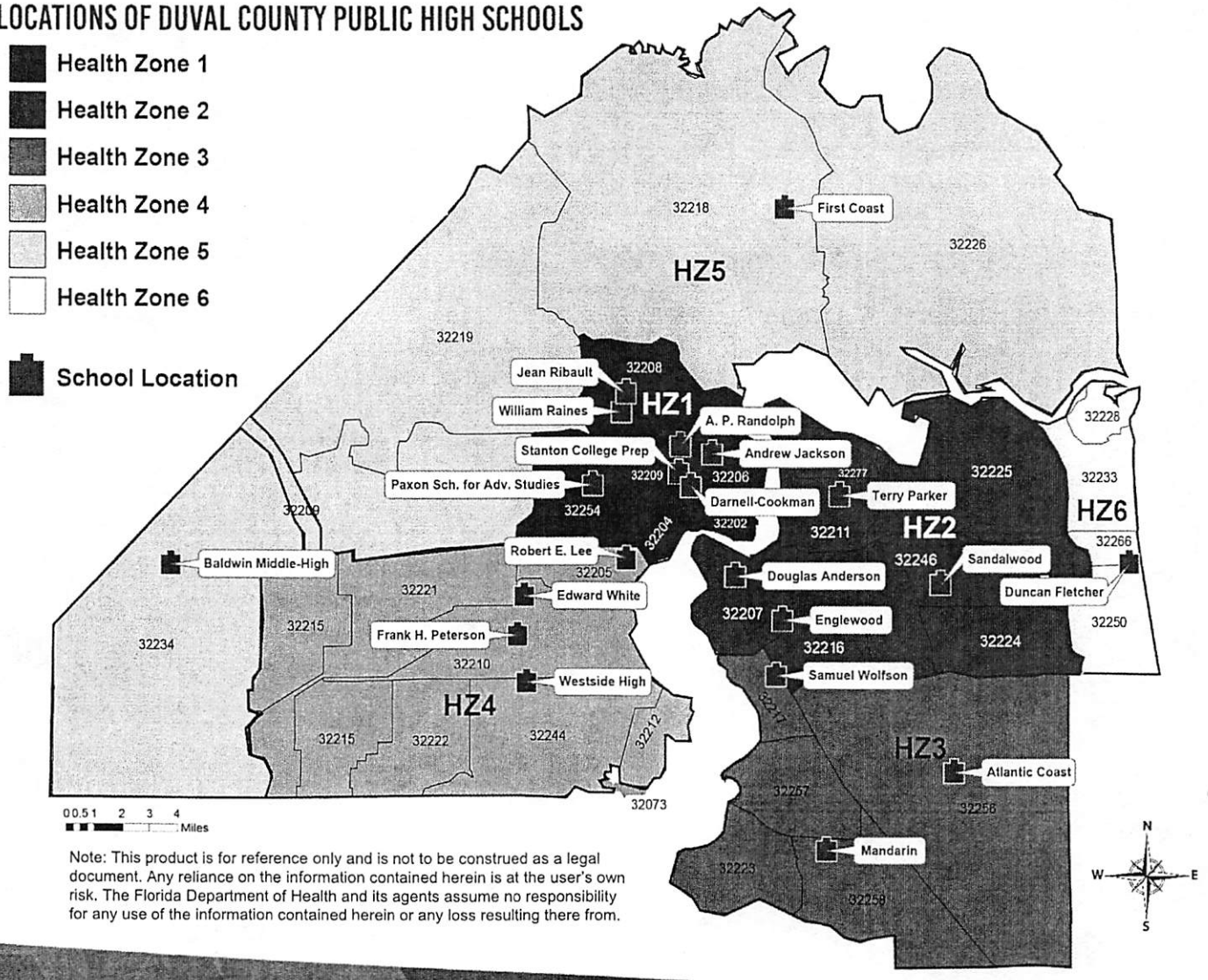
LOCATIONS OF DUVAL COUNTY PUBLIC HIGH SCHOOLS



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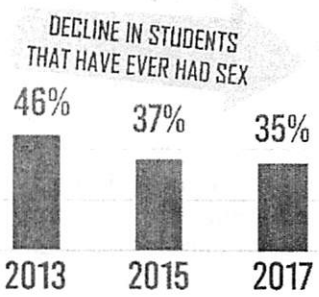
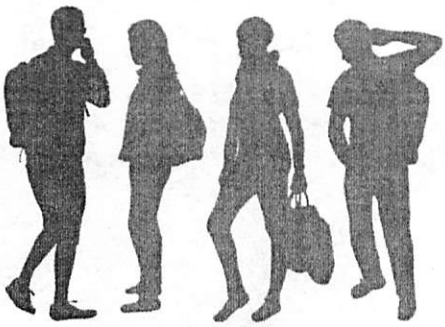
SEXUAL ACTIVITY AMONG DUVAL COUNTY HIGH SCHOOL STUDENTS CONTINUES TO DECLINE. IN 2017:

- About 1 in 3 Duval County high school students have ever had sex – a 23% decrease since 2013.
  - Male students (42.0%) were more likely to report ever having sex than female students (33.0%).
  - Students in HZ 3 (27.2%) were less likely to have ever had sex when compared to other HZs.



- About 1 in 4 Duval County high school students were currently sexually active – a 22% decrease since 2013.



1 IN 4 STUDENTS WERE CURRENTLY SEXUALLY ACTIVE

- Among high school students that were sexually active:
  - 57.7% used a condom the last time they had sex.
  - About 1 in 4 used birth control pills, implants, IUDs, or shots to prevent pregnancy the last time they had sex.
  - 18.2% used drugs or alcohol before the last time they had sex.
- Almost 1 in 7 Duval County high school students identified as lesbian, gay, or bisexual (LGB) compared to 1 in 10 Florida students.

FEWER DUVAL COUNTY HIGH SCHOOL STUDENTS RECEIVED HIV/AIDS EDUCATION. IN 2017:

- About 3 in 4 Duval County high school students reported having ever been taught about HIV/AIDS in school – a 7% decrease since 2013.
- Duval County high school students (17.1%) were more likely to have ever been tested for HIV when compared to Florida students (12.0%).

SEXUAL RISK BEHAVIORS

It's important that the community promotes messages of safe sex and provides information about sexual risk behaviors. Sexual risk behaviors are associated with increased risk of STDs/HIV and unintended pregnancy.

SEXUAL RISK BEHAVIORS INCLUDE:

- Having unprotected sex
- Consuming alcohol or drugs before sexual intercourse
- Neglecting to discuss sexual history with partners

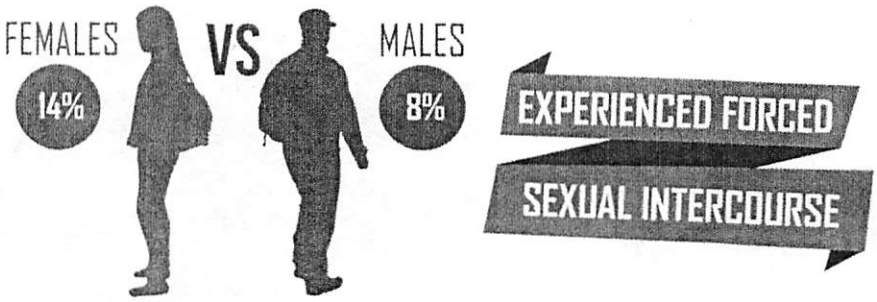
3 IN 4 STUDENTS HAVE BEEN TAUGHT ABOUT HIV/AIDS IN SCHOOL

In 2016, Duval County had the 5th highest rate in the state for bacterial STDs among 15 to 19 year olds. In an effort to address the high rate of STDs among Duval County youth, eight teen health centers were opened that offer sexual health services, such as HIV, STD, and pregnancy testing, treatment, group education, and access to condoms. During the 2016-2017 school year:

- 876 students received group education
- 190 students were tested for HIV
- 190 students were tested for gonorrhea and chlamydia
- 38 students had a pregnancy test

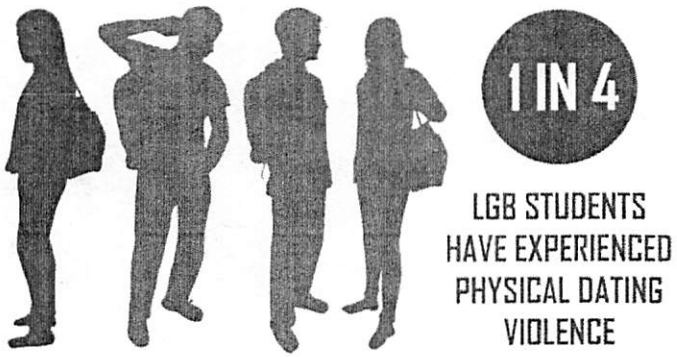
DUVAL COUNTY HIGH SCHOOL STUDENTS EXPERIENCE HIGHER RATES OF DATING AND SEXUAL VIOLENCE WHEN COMPARED TO FLORIDA. IN 2017:

- 12.3% of Duval County high school students experienced physical dating violence in the past year compared to 8.4% in Florida.
- 10.8% of Duval County high school students reported forced sexual intercourse compared to 6.5% in Florida.
    - Female students (13.5%) in Duval County were more likely to report forced sexually activity than male students (7.8%).



LGB HIGH SCHOOL STUDENTS IN DUVAL COUNTY WERE SIGNIFICANTLY MORE LIKELY THAN HETEROSEXUAL STUDENTS TO EXPERIENCE DATING AND SEXUAL VIOLENCE. IN DUVAL COUNTY HIGH SCHOOLS IN 2017:

- 23.3% of LGB students experienced physical dating violence compared to 8.7% of heterosexual students.
- 26.1% of LGB students experienced sexual violence compared to 10.6% of heterosexual students.
- LGB students (21.2%) are almost three times more likely than heterosexual students (7.9%) to have been forced to have sex.



WHAT IS TEEN DATING VIOLENCE?

Teen dating violence is a type of intimate partner violence. It occurs between two people in a close relationship. The nature of the dating violence can be physical, emotional, or sexual. Many teens do not report dating violence because they are afraid or ashamed.

WHAT ARE THE CONSEQUENCES OF TEEN DATING VIOLENCE?

Teens that experience dating violence are more likely to:

- Experience depression and anxiety
- Think about suicide
- Engage in unhealthy behaviors, such as alcohol, tobacco, and drug use
- Exhibit antisocial behaviors
- Experience victimization as an adult

WHAT ARE THE SOLUTIONS TO TEEN DATING VIOLENCE?

Dating violence can be prevented when teens, families, organizations, and communities work together to implement effective prevention strategies. Effective interventions:

- Promote healthy relationships
- Improve problem-solving
- Change norms
- Reduce other risk behaviors, such as alcohol and drug use

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County	FL
SEXUAL BEHAVIORS								
Ever had sexual intercourse	39.7%[3]	32.7%	27.2%	40.4%[3]	36.8%	36.3%	35.2%	38.1%[3]
Had sexual intercourse for the first time before age 13	4.1%	4.8%	3.3%	5.4%	6.5%	4.9%	4.9%	5.0%
Had sexual intercourse with four or more persons during their life	9.4%	9.9%	7.5%	9.4%	6.9%	10.5%	8.9%	9.9%
Were sexually active in the past 3 months	25.2%	22.2%	16.5%[4]	28.7%	23.7%	24.9%	23.5%	26.3%[3]
Ever had oral sex	45.5%	37.2%	34.7%	42.2%	39.1%	47.6%	40.0%	37.2%[1,6]
Used a condom***	52.2%	56.7%	62.8%	61.2%	58.5%	47.5%	57.7%	57.4%
Used birth control pills, IUDs, implants, or shots***	17.9%	21.8%	26.8%	20.4%	25.7%	19.0%	23.4%	21.8%
Did not use any method to prevent pregnancy***	18.3%	21.5%	11.4%	18.8%	15.7%	20.1%	18.0%	13.3%
Drank alcohol or used drugs before sexual intercourse***	22.3%	21.0%	15.6%	14.7%	13.6%	29.7%	18.2%	20.4%
Described themselves as lesbian, gay, or bisexual	15.5%	17.5%	16.6%	16.5%	13.8%	13.0%	15.5%	10.3%[1-4, D]
Were ever taught in school about AIDS or HIV infection	78.6%	70.5%	74.4%	75.5%	76.1%	73.9%	74.4%	73.4%
Were ever tested for HIV	21.6%[3]	16.2%	11.4%	16.9%	23.2%[3]	13.6%	17.1%	12.0%[1,5]
SEXUAL VIOLENCE								
Experienced physical dating violence**	13.6%	16.8%[4]	10.6%	8.9%	11.2%	10.7%	12.3%	8.4%[2,D]
Experienced sexual dating violence**	9.8%	13.2%[4]	6.6%	5.7%	8.2%	7.8%	8.8%	9.6%
Were ever forced to have sexual intercourse	9.4%	12.7%	8.6%	11.4%	11.3%	9.1%	10.8%	6.5%[2, 4, 5, D]
A revealing or sexual photo of them had been texted, e-mailed, or posted electronically without their permission*	5.8%	8.8%	3.6%[2]	5.3%	3.9%[2]	7.2%	5.9%	QNA

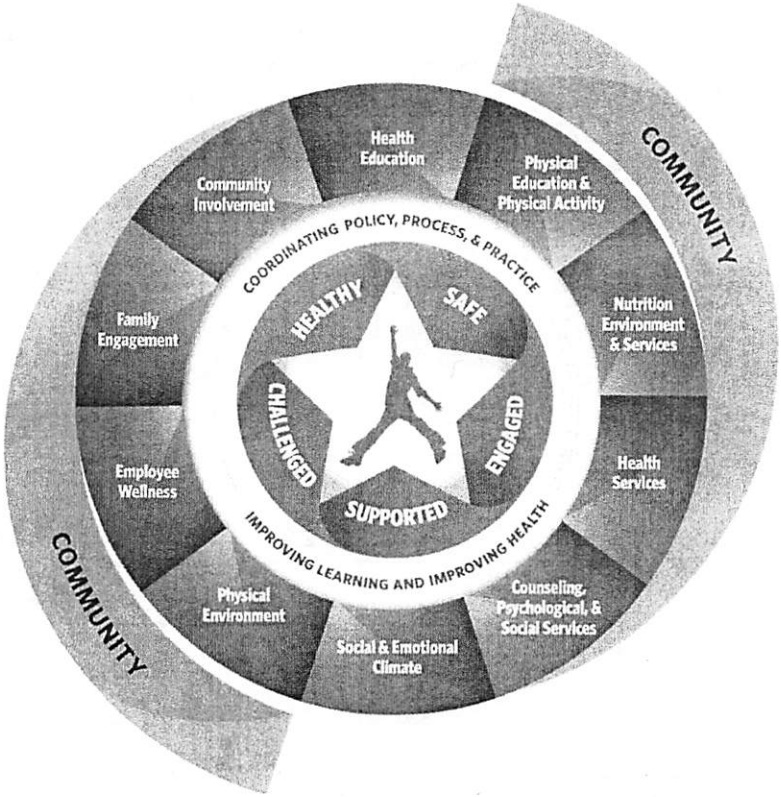
Notes:
QNA = Question not asked * = During the 30 days before the survey ** = During the 12 months before the survey
*** = During last sexual intercourse among students who were sexually active

The superscript refers to a specific geographic area (e.g., superscript 1 refers to Health Zone 1, D refers to Duval County) and indicates that the data for that geographic area is significantly different from the reference geographic area.

Comparisons by County and State are provided by the CDC (See YRBS methodology at www.CDC.gov). Comparisons by Health Zone are provided by the Florida Department of Health in Duval County.

DUVAL COUNTY, 2017

The CDC recommends a holistic approach to improving health behaviors and outcomes among youth. The Whole School, Whole Community, Whole Child (WSCC) model emphasizes that schools, health agencies, parents, and communities share a common goal of supporting health and academic achievement in adolescents. The WSCC model focuses its attention on the child, emphasizes a school-wide approach, and acknowledges learning, health, and the school as being a part of the local community. Importantly, the WSCC model provides a framework for how various sectors can work together to ensure that *every young person* is healthy, safe, engaged, supported, and challenged. This approach is illustrated in the image to the right.



Using information from the CDC and other research-based initiatives the below content provides recommendations for continued progress in building healthy relationships and preventing sexual risk behaviors in Duval County.

EXEMPLARY SEXUAL HEALTH EDUCATION

Increasing the number of schools that provide sexual health education is a critical objective for improving youth outcomes.

Sexual health education should address:

- Healthy relationships
- Communication skills
- Condoms and other contraception methods
- Goal-setting and decision-making skills
- Preventative care
- How to access accurate and reliable health information
- Sexual orientation
- Gender roles, gender identity, and gender expression

SEXUAL HEALTH SERVICES

Sexual health services are most effective when they are easily accessible, accepting, and confidential. Schools can improve adolescents' access to key sexual health services via the provision of on-site services or referrals to adolescent-friendly providers in the community.

Sexual health services include:

- Sexual health education
- HIV and STD testing and treatment
- Contraceptive services
- Pregnancy testing
- Condom provision
- HPV vaccination
- Guidance and counseling services

SAFE AND SUPPORTIVE ENVIRONMENTS

Safe and supportive school environments are associated with improved education and health outcomes for all students.

Strategies for improvement:

- Develop a school environment free of bullying and sexual harassment
- Engage parents and students
- Partner with outside organizations to focus on safe school environments
- Implement positive youth-development programs, Gay-Straight Alliances, safe spaces, and visible allies

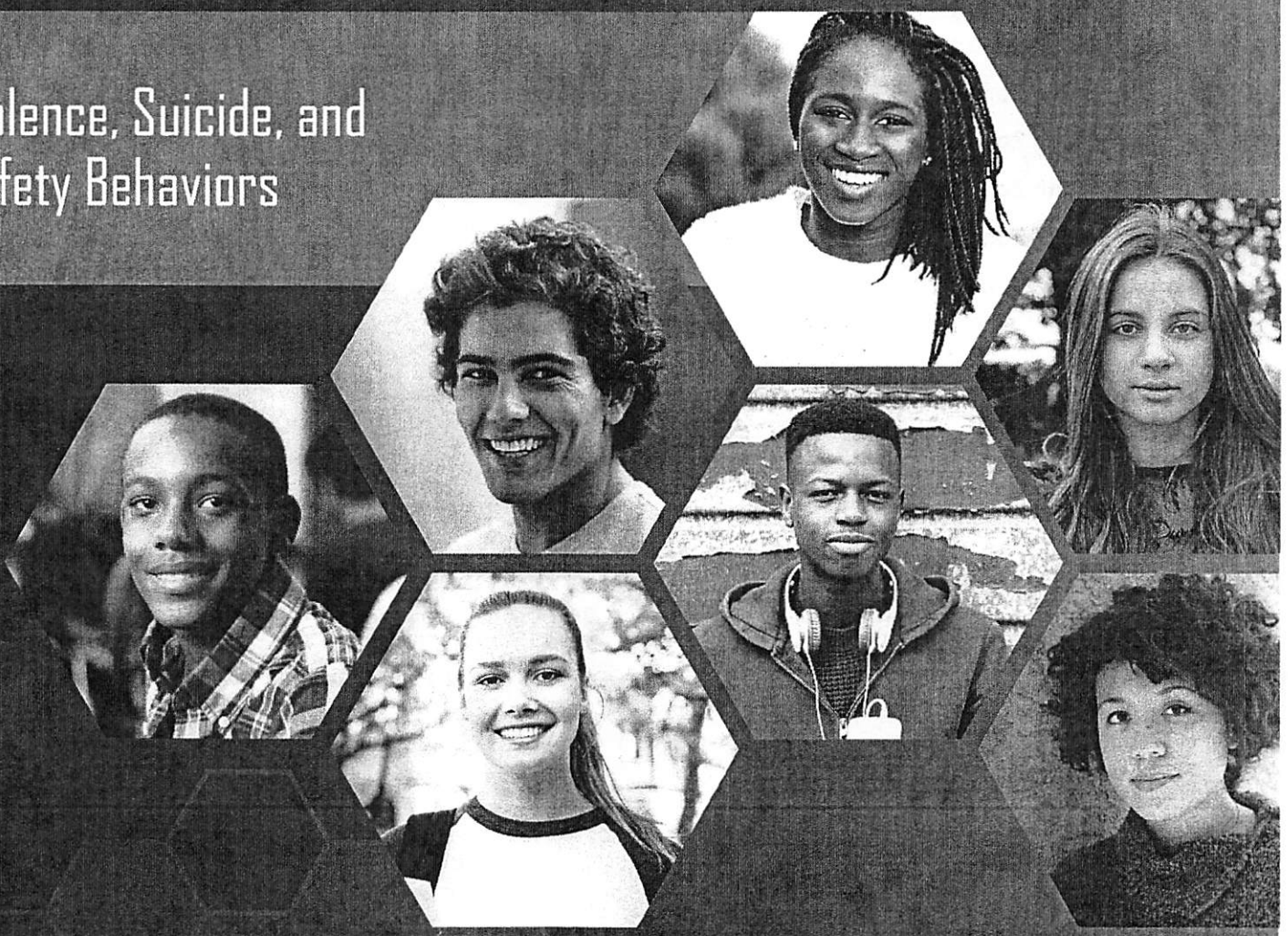
Florida HEALTH
Duval County

DUVAL COUNTY
PUBLIC SCHOOLS

YOUTH RISK BEHAVIOR SURVEY

Duval County High School Students, 2017

Violence, Suicide, and Safety Behaviors

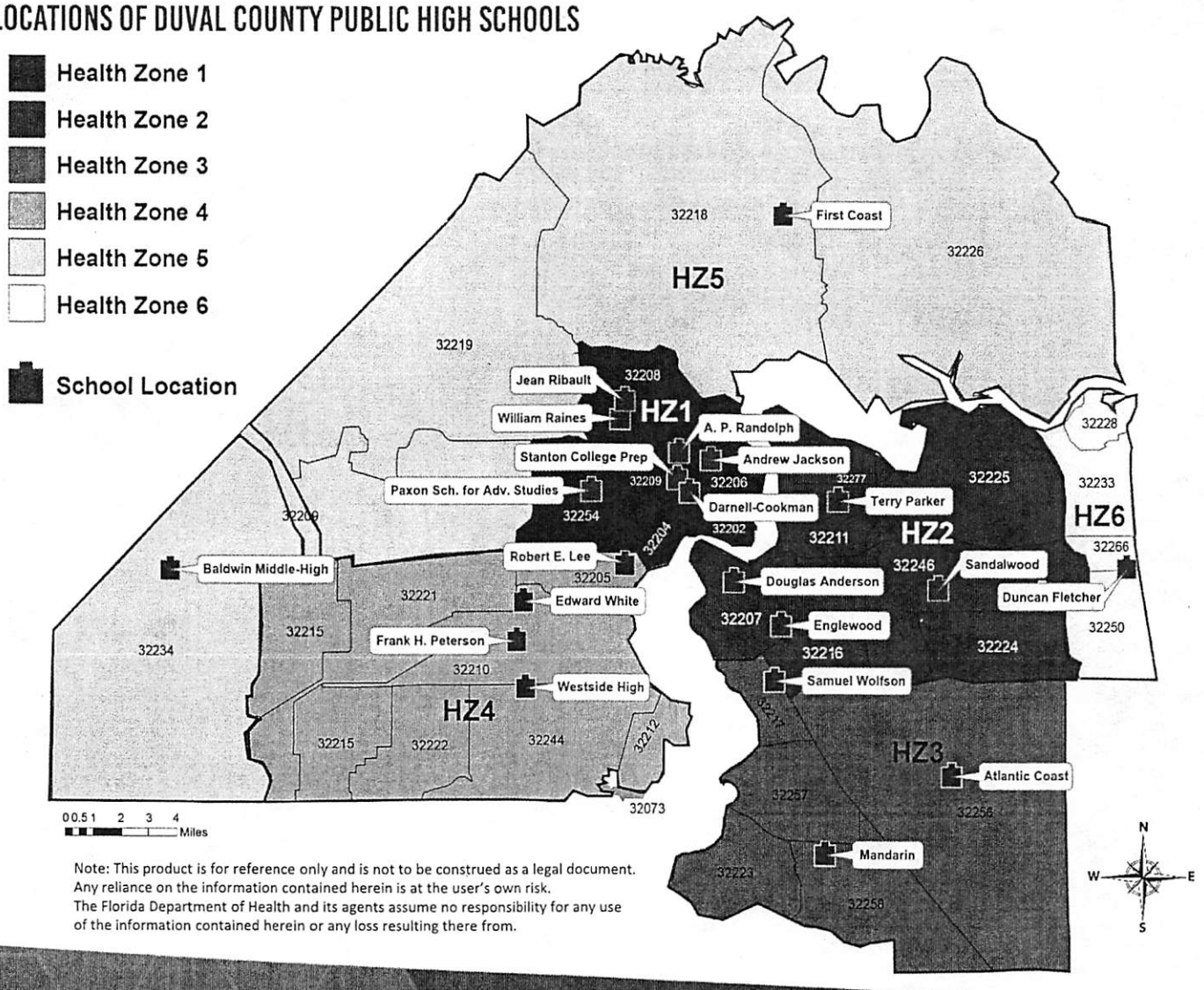


INTRODUCTION

The Youth Risk Behavior Survey (YRBS) is a self-administered, school-based, confidential, and anonymous survey that was conducted in Duval County Public Schools (DCPS) during the spring of 2009, 2011, 2013, 2015, and 2017. This is part of a national effort by the Centers for Disease Control and Prevention (CDC) to obtain information pertaining to youth health behaviors that contribute to the leading causes of death and disability among youth and adults. This report summarizes 2017 YRBS data on violence, suicide, and safety behaviors among Duval County high school students. In 2017, 3,493 students from 21 Duval County public high schools participated in the YRBS.

Duval County is located on the northeast coast of Florida and is comprised of urban, suburban, and pockets of rural areas. The County is divided into six Health Zones (HZ) which differ in terms of demographics, socioeconomic factors, and health outcomes. The HZs are based on mutually exclusive zip codes tied to county organization and demographics. The HZ analysis of the YRBS data increases our understanding of differences in the geographic distribution of health-related behaviors in Duval County and can assist in planning targeted health interventions.

LOCATIONS OF DUVAL COUNTY PUBLIC HIGH SCHOOLS



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VIOLENCE REMAINS A SIGNIFICANT CHALLENGE AMONG HIGH SCHOOL STUDENTS IN DUVAL COUNTY. IN 2017:

- During the 30 days before the survey:
  - 1 in 9 high school students missed school because they felt unsafe. About 1 in 5 lesbian, gay, and bisexual (LGB) students missed school because they felt unsafe compared to 1 in 11 heterosexual students.
  - 4.0% of high school students carried a weapon on school property – a 34% decrease since 2013.
- During the 12 months before the survey:
  - About 1 in 10 high school students were threatened or injured with a weapon on school property. About 1 in 6 LGB students were threatened or injured with a weapon compared to 1 in 14 heterosexual students.
  - Over 1 in 10 high school students were in a physical fight on school property. Male students (13.9%) were more likely to have been in a fight than female students (8.2%).
- HZ 2 ranked the highest for 9 out of 13 violence indicators and consistently showed numbers that were significantly higher than the Florida average.

MORE HIGH SCHOOL STUDENTS IN DUVAL COUNTY EXPERIENCED BULLYING WHEN COMPARED TO FLORIDA. IN 2017:

- During the 30 days before the survey:
  - About 1 in 5 high school students in Duval County reported being bullied at school versus 1 in 7 Florida students. Female students (21.5%) in Duval County were more likely to have been bullied than male students (17.1%).

- About 1 in 6 high school students in Duval County reported being electronically bullied versus 1 in 9 Florida students. Female students (19.6%) in Duval County were more likely to have been electronically bullied than male students (11.6%).

WHAT IS BULLYING?

Bullying is a form of violence. The CDC defines bullying as any unwanted aggressive behavior by another person or group of people that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated. Bullying can include aggression that is physical, verbal, or relational.

WHAT IS CYBERBULLYING?

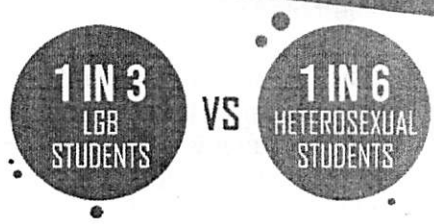
Cyberbullying is bullying that takes place over digital devices. It is possible for cyberbullying to cross the line into criminal behavior, such as the sharing of illicit photos.

TEENS WHO ARE BULLIED ARE AT HIGHER RISK FOR:

- Physical injury
- Depression and anxiety
- Substance use
- Sleep issues
- Health complaints
- Academic problems
- Suicide

TEENS WHO BULLY OTHERS ARE AT HIGHER RISK FOR:

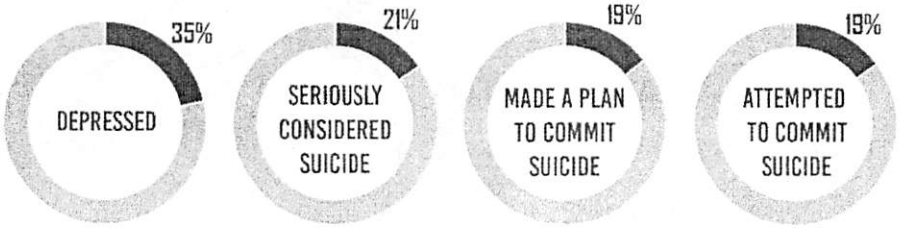
- Substance use
- Academic problems
- Violence throughout adolescence and into adulthood



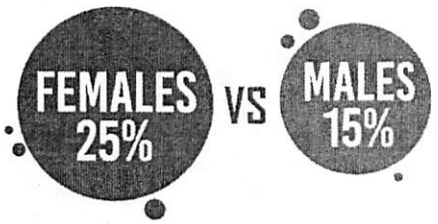
HAVE BEEN BULLIED ON SCHOOL PROPERTY

DUVAL COUNTY HIGH SCHOOL STUDENTS WERE AT INCREASED RISK FOR SUICIDE-RELATED BEHAVIORS. DURING THE 12 MONTHS BEFORE THE 2017 SURVEY:

- Depression and suicide-related behaviors were more common among Duval County high school students compared to Florida students.



- Over 1 in 3 Duval County high school students experienced depression for two or more weeks in a row – a 24% increase since 2013. Female students (44.7%) were more likely to experience depression than male students (25.2%).
- Over 1 in 5 Duval County high school students seriously contemplated suicide – a 22% increase since 2013. Female students (25.3%) were more likely to report suicide ideation than male students (15.0%).



HAVE CONTEMPLATED SUICIDE

- Close to 1 in 5 Duval County high school students made a plan to attempt suicide – a 19% increase since 2013. Female students (21.8%) were more likely to have made a plan to attempt suicide than male students (14.1%).
- Close to 1 in 5 Duval County high school students attempted suicide – a 63% increase since 2013. Female students (20.6%) were more likely to have attempted suicide than male students (16.9%).
- Suicide risk behaviors were more common among LGB high school students. In Duval County, close to 1 in 3 LGB students have attempted suicide compared to 1 in 6 heterosexual students.

NATIONALLY, SUICIDE IS THE SECOND LEADING CAUSE OF DEATH FOR YOUTH AGES 15-19.

SUICIDE AFFECTS ALL YOUTH, BUT SOME GROUPS ARE AT HIGHER RISK:

- Boys with an emotional or behavioral disorder
- LGB youth
- Youth with a substance abuse problem
- Youth that have lost a friend or relative to suicide
- Native American/Alaskan Native and Hispanic youth
- Youth living in urban areas or in poverty

RISK FACTORS:

- Family history of suicide
- History of depression or other mental issues
- Poor grades despite effort
- Alcohol or drug use
- Easy access to lethal means
- Lack of social connections and support
- Recent situational crisis

PROTECTIVE FACTORS:

- The presence of an important person in the youth's life
- Good coping skills
- A supportive and caring family
- Interests and activities

NATIONAL SUICIDE PREVENTION LIFELINE: 1-800-273-TALK (8255)

RISK FACTORS	HZ1	HZ2	HZ3	HZ4	HZ5	HZ6	Duval County	FL
VIOLENCE								
Did not go to school because they felt unsafe at school or on their way to or from school*	11.3%	16.4%	9.2%[2]	8.9%[2]	13.5%	7.1%[2]	11.8%	10.2%[2]
Were in a physical fight**	25.4%	28.0%	16.9%[2]	24.9%	25.8%[3]	18.1%[2]	24.1%[3]	21.1%[2]
Were in a physical fight on school property**	9.0%	13.9%	5.4%[2]	11.6%[3]	10.7%	6.6%[2]	10.4%[3]	7.9%[2]
Carried a weapon on school property*	4.1%	6.1%	1.9%[2]	2.3%[2]	2.0%[2]	4.9%	4.0%	3.2%[2]
Were threatened or injured with a weapon on school property**	7.8%[2]	15.8%	6.3%[2]	6.8%[2]	7.0%[2]	7.7%[2]	9.4%[2]	8.4%[2]
Threatened or injured someone with a weapon on school property**	4.7%[2]	13.0%	3.7%[2]	5.0%[2]	5.9%[2]	7.8%	7.2%[2,3]	QNA
BULLYING								
Were bullied on school property**	18.0%	23.3%	16.3%	18.4%	21.5%	20.8%	19.9%	14.3%[2,5,D]
Bullied someone on school property**	9.0%	11.8%	9.9%	8.5%	10.3%	13.8%	10.3%	QNA
Were electronically bullied**	11.5%[2]	20.0%	14.7%	12.4%[2]	18.2%	20.7%	16.1%	11.5%[2,5,D]
Were the victim of teasing or name calling because someone thought that they were lesbian, gay, or bisexual	12.8%	17.0%	14.3%	13.1%	14.7%	11.1%	14.4%	9.7%[2,3,5,D]
SUICIDE								
Felt sad or hopeless almost everyday for two or more weeks in a row**	33.7%	36.4%	39.4%[6]	34.9%	33.0%	26.9%	35.1%	27.8%[2-4,D]
Seriously considered attempting suicide**	19.9%	24.0%	21.2%	20.4%	17.6%	16.8%	20.8%	13.8%[1-4,D]
Made a serious plan to attempt suicide**	20.2%	17.3%	19.0%	18.8%	19.8%	14.8%	18.5%	10.7%[1-5,D]
Attempted suicide **	17.1%	24.5%	15.9%[2]	16.8%[2]	15.5%[2]	19.6%	18.8%[2]	7.6%[1-6,D]
SAFETY BEHAVIORS								
Texted or e-mailed while driving a car or other vehicle*	29.3%	30.9%	30.1%	28.4%	27.9%	40.3%	30.3%	35.1%
Rode with a driver who had been drinking alcohol*	16.9%	24.0%	17.9%	19.0%	17.2%	19.4%	19.6%	17.1%[2]
Drove a car or other vehicle when they had been drinking alcohol*	4.9%	6.4%	2.5%	3.1%	3.9%	8.8%	4.7%	5.8%

Weapon = A gun, knife, or club

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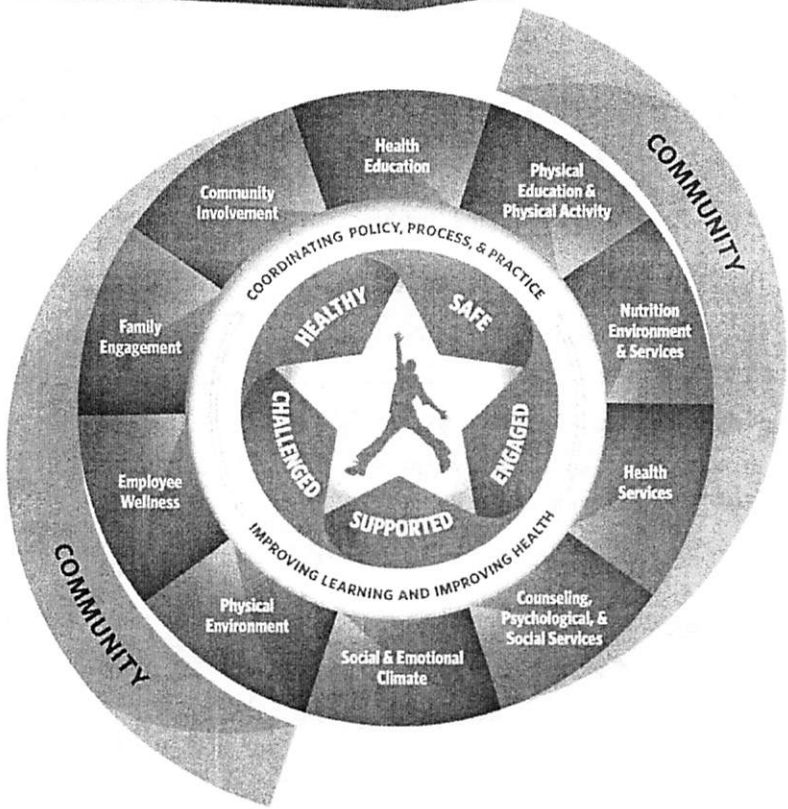

Using information from the CDC and other research-based initiatives the below content provides recommendations for addressing bullying and other issues related to adolescent safety in Duval County.

Multifaceted programs that address prevalent issues result in programs that are more meaningful for the community, as well as more cost effective.

Tailor programs to address risks and enhance strengths in a community	Using HZ data, interventions can be developed that address specific risks, such as bullying, that are present in a community. Evidence-based programs can also be tailored to more effectively address the needs of a community. Consider which groups are most affected, where the behavior is taking place, what type of behavior is happening, and what is currently being done.
Develop strategic partnerships	No one person (e.g., parent, teacher, mentor) can implement suicide prevention efforts on their own. Build strategic partnerships between anti-bullying groups and those who have direct contact with youth (e.g., coaches, teachers). Adults who supervise a young person can help prevent suicide by knowing the risk factors and warning signs, asking youth that they are concerned about if he/she has been thinking about suicide, and providing timely referrals to community resources.
Support and empower youth	Involvement in violence – even as a witness – can have serious and long lasting consequences for youth. Provide support and referrals for all youth involved and include their families. Empower youth by providing concrete, positive ways that they can influence the social norms of their peer group. Provide training to youth on safe and effective actions that they can use when they are concerned about a peer or witness a peer being bullied.