PICTURING A HEALTHIER FUTURE
A STATE STRATEGIC PLAN FOR INDIANA’S ADOLESCENTS
“[Adults] say they want an adolescent’s opinion, but they don’t really care what we think. They’re like, ‘Oh, this is good for them; let’s do this.’ We are different people, we have different thoughts, and we are unique in every aspect of everything.”

—19-YEAR-OLD MALE
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We would also like to thank Shannon Ross for editing the plan and Amy McAdams for her design of the plan.
Dear Partners in Adolescent Health:

The Indiana State Department of Health and the Indiana Coalition to Improve Adolescent Health (ICIAH) recognize it is important to empower adolescents to make positive decisions that will improve their health and well-being. However, the work cannot be done by young people, alone.

Since its inception, the ICIAH has made it a priority to develop the state’s first adolescent health plan to address the needs of this special population. The State Department of Health and the ICIAH encourage adolescents and all who care about their well-being to be strong advocates for adolescents’ health. As you read through this plan, think about ways you can contribute to improving the health outcomes of adolescents and take action. Encourage others in your community to do the same.

While good health is important at all ages, adolescents are a unique group with health needs that differ significantly from those of young children and adults. Addressing their particular health needs is critically important because, in our state, adolescents (ages 10–24) account for nearly one-quarter of the state’s population. And, three-quarters of morbidity and mortality among adolescents can be prevented—a sign that there is still much work to be done.

Remembering our own adolescence, we know this was an impressionable stage in life and the time in which many health habits and behaviors (whether good or bad) were formed. With this knowledge, action must be taken to help our adolescents adopt healthy lifestyles in order for them to develop and reach their full potential into adulthood.

I challenge you to be part of our efforts to promote adolescent health. I think you would agree that our young people expect and deserve as much.

For a Healthier Tomorrow,

JUDITH A. MONROE, M.D.
STATE HEALTH COMMISSIONER
The Indiana Coalition to Improve Adolescent Health (ICIAH) is composed of individuals and representatives from youth-serving agencies and organizations who share the common goal of improving the health of adolescents and emerging adults. The ICIAH mission is to promote optimal health and well-being for all Hoosier adolescents (ages 10–24), with an emphasis on prevention and access to quality, comprehensive health care.

The ICIAH goals are to increase awareness of the health issues affecting adolescents, provide support and accurate health-resource information to adolescents and those who serve and care for adolescents, and encourage collaboration among agencies and organizations whose services and decisions affect adolescents’ health.

The ICIAH vision is a future in which all Hoosier adolescents:

- Are empowered to make healthy choices and are prepared to live productive lives
- Have access to high-quality health care with providers skilled in the care of adolescents
- Live, play, learn, and work in safe environments
- Are supported by trusted adults to reach their full potential
- Are able to communicate with parents, family members, and other adults
- Have access to scientifically accurate health information
- Are financially literate and prepared to enter the worlds of work and continuing education
- Receive positive, nonjudgmental feedback from adults in their lives
- Have hope for the future

We challenge all Hoosier adolescents, parents, educators, health care providers and their professional organizations, legislators, faith-based organizations, and youth-serving organizations to work toward making this vision a reality.

The coalition is pleased to produce this plan, and eager to share it with all Hoosiers. Only a handful of other states in the country have published such a document, making Indiana a leader in identifying, increasing awareness about, and addressing health issues relevant to the adolescent population.

Adolescents continually compete for limited resources at a time when the need for services responsive to the unique challenges facing this population is becoming more widely recognized. The health priorities discussed in this plan warrant the determined effort of all Hoosiers, including leadership from the Indiana State Department of Health.

The Indiana State Department of Health (ISDH) has supported an Adolescent Health Program since 1981, funding school-based clinics to serve this population. Beginning in 1993, an individual has been designated to serve in the position of State Adolescent Health Coordinator. The ISDH continues its support and commitment to providing more resources and programs to promote adolescent health and have a positive impact on this population.
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= quote  = statistic  = definition
Adolescence is a time of growth and development, the time in life when pivotal change occurs biologically, cognitively, emotionally, and socially. Adolescence is also the time when lifestyle habits, including behaviors that affect one’s health and well-being, are established. The habits that are formed during this time in life have been shown to persist throughout adulthood. Establishing healthy behaviors as an adolescent is easier and more effective than trying to change unhealthy behaviors during adulthood.

*Picturing a Healthier Future: A State Strategic Plan for Indiana’s Adolescents* utilizes the Centers for Disease Control and Prevention’s “21 Critical Health Objectives for Adolescents and Young Adults” (see the Appendix) as a guide in identifying health priorities for Hoosier adolescents, and presents these priorities within the context of positive youth development. Positive youth development recognizes that all young people must acquire certain strengths, skills, and competencies to achieve a happy, healthy, and productive adulthood.

This plan identifies ten priority issues affecting the health and well-being of Hoosier adolescents, based on an assessment of health risk behavior data and morbidity and mortality data for adolescents in Indiana. The ten issues are classified into one of two categories: “Access to Care” or “Prevention.”

*Access to care* refers to the capability of adolescents to receive needed health care from providers skilled in the care of adolescents. Access to care depends on such things as the availability of transportation to and from a health care provider, the location (proximity) of a health care provider’s office in relation to an adolescent’s home, the cost of services, and the hours of operation (whether appointments are available before and after school or on the weekend).

*Prevention* priority issues deal with health risks that could be avoided with the proper intervention. The leading causes of death, disability, and disease among adolescents (ages 10–24) in Indiana are related to behaviors that are *preventable*. The consequences of Hoosier adolescents engaging in such behaviors are costly in terms of loss of human life, reduction in quality of life, and financial burden, including direct medical services and loss of productivity.
The ten priority issues included in this plan are as follows:

**Access-to-Care Priorities**
- **Health Care Capacity:** Increase the quality of health care that providers offer to adolescents
- **Health Insurance:** Increase the number of adolescents enrolled in public and private health insurance
- **Mental Health Services:** Increase mental health services for adolescents

**Prevention Priorities**
- **Binge Drinking:** Decrease the proportion of adolescents who engage in binge drinking
- **Cigarette Smoking:** Decrease cigarette-smoking rates among adolescents
- **Dating Violence:** Decrease the prevalence of dating violence among adolescents
- **Motor Vehicle Fatalities:** Decrease the number of adolescent deaths resulting from motor vehicle crashes
- **Obesity:** Decrease the prevalence of overweight and obesity among adolescents
- **Sexually Transmitted Infections:** Decrease the incidence of sexually transmitted infections among adolescents
- **Suicide:** Decrease suicidality (including suicidal thoughts and attempts) among adolescents

For each priority, this plan presents an overview of the issue, providing a snapshot of how it is currently affecting the health of Hoosier adolescents and communities. Following each overview are recommendations of ways to bring about change in that area. Lastly, you will find a chart (called a *logic model*) for each priority issue, designed to show how recommended actions lead to changes in knowledge, skills, and attitudes, which in turn lead to changes in behaviors, and, ultimately, to achieving a goal.

It is important for our society to begin to recognize that young people are not problems to be fixed, but rather assets to be nurtured. By seeing adolescents as resources, we can build upon their strengths and capabilities to develop within the context of our community. The community’s role is to provide all young people with the experiences, relationships, resources, opportunities, and support they need to become happy, healthy, and productive adults.

This plan is an invitation to all sectors of Hoosier communities to come together to ensure the health and well-being of our state’s most significant resource—adolescents. This plan is written for you: the adolescent; the parent, guardian, or significant adult of an adolescent; the teacher; the health care provider; the legislator; the religious leader; or any citizen who encounters or cares about adolescents.

This plan offers Indiana leaders and citizens an opportunity to provide adolescents with a safe and supportive environment, to connect to adolescents and involve them in decision making, and to encourage healthier behaviors for adults and adolescents alike.
Adolescence is a time of growth and development, the time in life when pivotal change occurs biologically, cognitively, emotionally, and socially. Adolescence is also the time when lifestyle habits, including behaviors that affect one’s health and well-being, are established. The habits that are formed during this time in life have been shown to persist throughout adulthood. Establishing healthy behaviors as an adolescent is easier and more effective than trying to change unhealthy behaviors during adulthood.

Hoosier adolescents face a variety of challenges to their health and well-being—including obesity, depression, sexually transmitted infections, and alcohol and tobacco use—all of which can interfere with achieving their full potential. This plan is an invitation to all sectors of Hoosier communities to come together and support adolescents in overcoming these obstacles. This plan is written for you: the adolescent; the parent, guardian, or significant adult of an adolescent; the teacher; the health care provider; the legislator; the religious leader; or any citizen who encounters or cares about adolescents. This plan offers Indiana leaders and citizens an opportunity to provide adolescents with a safe and supportive environment, to connect to adolescents and involve them in decision making, and to encourage healthier behaviors for adults and adolescents alike.

FRAMEWORK FOR THIS PLAN

_Picturing a Healthier Future: A State Strategic Plan for Indiana’s Adolescents_ utilizes the Centers for Disease Control and Prevention’s “21 Critical Health Objectives for Adolescents and Young Adults” (see the Appendix) as a guide in identifying ten health priorities for Hoosier adolescents, and presents these priorities within the context of positive youth development.

Positive youth development recognizes that all young people must acquire certain strengths, skills, and competencies—academic, emotional, social, and/or physical—in order to achieve a happy, healthy, and productive adulthood. Young people will develop in positive ways when their communities and relationships provide the resources for them to gain these abilities.

It is important for our society to begin to recognize that young people are not problems to be fixed, but rather assets to be nurtured. Adolescents are Indiana’s most valuable resource—they
will become our workers, taxpayers, and leaders. When we see adolescents as resources, we can build upon their strengths and capabilities to develop within our community. The community’s role is to provide all young people with the experiences, relationships, resources, opportunities, and support they need to become successful adults.

DEFINING ADOLESCENCE

As you read through this plan, keep in mind that, in accordance with the National Initiative to Improve Adolescent Health1, this plan defines adolescence as the time period between the ages of 10 and 24. The adolescent population can be further delineated into the following categories:

- 10 to 14 years old: younger adolescents
- 15 to 19 years old: older adolescents
- 20 to 24 years old: emerging adults

The inclusion of younger adolescents, beginning at age 10, is necessary because the initiation of puberty is occurring at much younger ages—approximately age 9 in girls and 11.5 in boys (Euling et al., 2008). Additionally, the years of younger adolescence are often viewed as gateway years: a time in which it is possible to make an impression on health and lifestyle behaviors. As younger adolescents age, it will become harder to influence such behaviors. In our global society, children are exposed to health risk behaviors at young ages and need to be empowered to interpret all information and make the best, most appropriate lifestyle choices.

The inclusion of the emerging-adult subpopulation in the definition of adolescence is also significant. It is known that the brain is still developing until roughly the age of 25. Similar to rapid brain development during infancy, substantial development continues to occur during transitions from pre-adolescence through emerging adulthood. There is increasing biological and sociological evidence that emerging adulthood provides a pivotal development period characterized by “self focus, instability, feeling in-between, identity exploration, and of possibilities,” all of which are necessary in preparation for healthy adulthood (Arnett, 2006).

Thirty-six percent of Indiana’s population is under the age of 24, with nearly 22% between the ages of 10 and 24 (U.S. Census Bureau, 2000).

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1 The National Initiative to Improve Adolescent Health (NIIAH) is a collaborative effort to improve the health of adolescents. NIIAH is strongly grounded in Healthy People 2010, a set of 468 health objectives for the nation to achieve over the first decade of the 21st Century, which includes a subset of “21 Critical Health Objectives for Adolescents and Young Adults” (see the Appendix).
Some content or recommendations within this plan are geared toward, or more appropriate for, younger adolescents, older adolescents, or emerging adults. We encourage you to use discretion in determining how you interpret information and interact with adolescents of various ages.

**ADOLESCENT HEALTH AS A CRITICAL ISSUE**

Adolescents are overwhelmed with influential messages and pressures to engage in certain behaviors. Even adolescents who are legally minors often engage in adult behaviors that may jeopardize their health (Park, Brindis, Chang, & Irwin, 2008). In fact, the leading causes of death, disability, and disease among adolescents in Indiana are related to behaviors that are *preventable* (see Figure 1). The consequences of adolescents engaging in such behaviors are costly in terms of loss of human life, reduction in quality of life, and economic burden, including direct medical services and loss of productivity. Our task as adults is to guide young people in making the positive choices that will lead to a lifelong commitment to their well-being and quality of life.

*Figure 1: Hoosier Adolescent Mortality, Ages 10-24*

Source: Centers for Disease Control and Prevention (CDC), 2005a.

Because the public health system today is a collaborative effort of various entities (see Figure 2), such as health care providers, schools, faith-based organizations, community centers, and employers, we all must embrace the opportunities we have to make a positive impact on adolescents’ lives. We must work to build an infrastructure that focuses on the entire adolescent, not just on health problems that adolescents face (Park et al., 2008).

*Figure 2: Influences on Adolescent Health*
Ten Priorities

This plan identifies ten priority issues that affect the health and well-being of Hoosier adolescents, based on an assessment of health risk behavior, morbidity, and mortality data for adolescents in Indiana. We recognize that this plan is not comprehensive of all issues that affect the health and well-being of Hoosier adolescents. In selecting ten issues on which to focus, we considered both the “21 Critical Health Objectives for Adolescents and Young Adults,” from the Centers for Disease Control and Prevention, and Healthy People 2010, from the U.S. Department of Health and Human Services. We feel that the resulting plan addresses the most pressing needs of Hoosier adolescents, while maintaining a manageable scope. The priorities laid out in this plan may well change over time to match the evolving needs of Hoosier adolescents and the resources available to address those needs.

For each priority, this plan presents an overview of the issue, providing a snapshot of how it is currently affecting the health of Hoosier adolescents and communities. Following each overview are recommendations for ways to bring about change in that area. These recommendations were chosen based upon the three criteria: feasibility, resources, and potential for data monitoring.

- **Feasibility** was defined as having the highest likelihood of being accomplished within existing resources.
- **Resources** were defined as that which is available to implement a recommendation (programs, personnel, money, etc.).
- **Data monitoring** was defined as having mechanisms or systems available for gathering outcome data.

Lastly, you will find a chart (called a *logic model*) for each priority issue, designed to show how recommended actions lead to changes in knowledge, skills, and attitudes, which in turn lead to changes in behaviors, and, ultimately, to achieving a goal that will improve the health and well-being of adolescents in our state.

The ten issues in this plan are classified into one of two categories: “Access to Care” or “Prevention.” The italicized text after each priority relates the issue to Healthy People 2010 goals for the nation and/or the “21 Critical Objectives for Adolescents and Young Adults” (see the Appendix). Please note that these issues are not listed in order of importance, as they are all deemed critical to the health of adolescents.
Access to Care

- **Health Care Capacity:** Increase the quality of health care that providers offer to adolescents. *This priority aligns with the two overarching goals of Healthy People 2010: increase quality and years of healthy life, and eliminate health disparities. It also aligns with the Healthy People 2010 focus area, “Access to Quality Health Services.”*

- **Health Insurance:** Increase the number of adolescents enrolled in public and private health insurance. *This priority aligns with the two overarching goals of Healthy People 2010: increase quality and years of healthy life, and eliminate health disparities.*

- **Mental Health Services:** Increase mental health services for adolescents. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Substance Abuse and Mental Health.”*

Prevention

- **Binge Drinking:** Decrease the proportion of adolescents who engage in binge drinking. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Substance Abuse and Mental Health.”*

- **Cigarette Smoking:** Decrease cigarette-smoking rates among adolescents. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Chronic Disease.”*

- **Dating Violence:** Decrease the prevalence of dating violence among adolescents. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Violence.”*

- **Motor Vehicle Fatalities:** Decrease the number of adolescent deaths resulting from motor vehicle crashes. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Unintentional Injury.”*

- **Obesity:** Decrease the prevalence of overweight and obesity among adolescents. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Chronic Disease.”*

- **Sexually Transmitted Infections:** Decrease the incidence of sexually transmitted infections among adolescents. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Reproductive Health.”*

- **Suicide:** Decrease suicidality (including suicidal thoughts and attempts) among adolescents. *This priority aligns with the “21 Critical Health Objectives for Adolescents and Young Adults” category, “Substance Abuse and Mental Health.”*
WHAT ADOLESCENTS HAVE TO SAY

Public-health theory and practice suggest that programs directed at adolescents are most effective when they are informed by the perspectives of those they serve: adolescents. With these principles in mind, the Indiana Coalition to Improve Adolescent Health sought out the perspectives of adolescents across the state to inform this plan.

Six focus groups were conducted using a semi-structured guide that included questions such as “What makes an adolescent healthy?” Focus groups were audio recorded, transcribed, and analyzed for common themes. These focus groups were held in the following Indiana communities: Gary, Rossville, Scottsburg, Indianapolis, and Terre Haute. Participants included youth leaders, Future Farmers of America, members of a Latino student group, students from an alternative high school, parenting adolescents, and university freshmen.

Much as this plan does, participants in our focus groups identified health risk behaviors such as obesity, smoking, drinking (alcohol), stress, and unprotected sex as having an impact on one’s health and well-being.

While these participants recognized personal responsibility for one’s own health, they also viewed adolescent health as a shared responsibility among a number of additional players—family, peers, schools, and community members. Focus-group members identified parents as the most important people in supporting healthy behaviors. Participants told us that three ways relationships can support adolescents in choosing healthy behaviors are by providing connection, remaining positive and nonjudgmental, and being respectful:

- **Connection** means having someone to talk to who is willing to listen, and someone who can share similar life experiences. Forming connections with others who show support, encouragement, understanding, and a willingness to talk with them—as opposed to talking to them—is vital when adolescents are making health decisions.
- **Positive and nonjudgmental** relationships are ones where adolescents feel valued. These relationships encourage self-worth and support healthy behavior. Adolescents told us that they are particularly sensitive to being stigmatized or shamed.
- **Respect** encompasses being honest and truthful in the information shared with adolescents and involving adolescents in the decision-making process of things that will affect them. Adolescents in our focus group felt very
strongly about the value of being provided with honest, accurate health information in regard to risk behaviors. Oftentimes, such information is withheld from adolescents. For example, when adolescents have questions about sexual behaviors, they often find themselves ignored or given only partial information, perhaps because parents or other trusted adults in their lives are embarrassed to provide answers, believe that giving accurate information will lead to risky behaviors, or simply do not want to talk.

“Your parents support you. They basically have your back in what you need to do. They should give you positive criticism if criticism is needed. Nobody wants to be down all the time. You need that type of support and encouragement.”

—17-YEAR-OLD MALE

In addition to acknowledging the role of supportive relationships, adolescents in our focus groups stated that maintaining or choosing healthy behaviors is more manageable when the environment is also healthy. For example, eating fast food was cited as a response to having limited amounts of money to spend on meals and needing to go directly from school to work at a part-time job. Similarly, the high cost of a visit to the doctor’s office or to fill a medication prescription often results in adolescents bypassing these necessary services. Finances, schedules, resources, and surroundings all play a role in the behavior, and ultimately the health, of adolescents.
CASE STUDIES
As Hoosier adolescents strive to become healthy, happy, successful adults, they must overcome many obstacles along the way. Adolescents’ health and well-being are continually tested, forcing them to make decisions on how they will act. These obstacles and decisions are challenging for adolescents to juggle while maintaining good grades, friendships, and family life. To illustrate this complex reality, this plan introduces three adolescents who are each facing several obstacles that stand in their way of being healthy and making good decisions that will affect their current and future well-being. They may even remind you of adolescents in your own life. You can follow these adolescents throughout the plan to learn more about their stories.
Meet Michelle.

At 12 years old, she is active in her church’s youth group and gets good grades in school. Michelle has a few good friends, but lately she has suffered from low self-esteem and a lot of stress. She is often teased for being overweight compared to other girls at school. Michelle’s mother is growing more concerned about her daughter. She has noticed that Michelle has lost some of her energy and interest in being around her friends. Even the annual youth-group trip to the amusement park doesn’t seem to interest her. She wonders if Michelle may be getting sick or if something happened at school to upset her. Michelle’s mom, a single parent, recently got a second job for three nights a week and is beginning to wonder if Michelle misses the time they used to be able to spend together. Mom decides that she doesn’t want to be nosy and fears that trying to talk to her daughter will only push her farther away. Instead, Mom schedules a doctor’s appointment for Michelle with their family doctor and is hoping that he may be able to shed light on what is bothering her. Michelle’s story continues on page 20.

Meet Nathan.

Nathan is 17 years old and a senior in high school. Although he loves sports, he has never been a star athlete. But, last year, Nathan was named the most improved player on the football team, and this year he made varsity. Nathan has really started to shine as a wide receiver on the team—so much so that he has been offered a partial football scholarship for college next year. Nathan is excited to tell the news to his parents and to his older brother, who now lives in an apartment across town. Upon hearing the news, Nathan’s older brother decides that a celebration is in order, and invites Nathan to come over on Saturday so they can toast his achievement. Nathan is looking forward to seeing his brother, whom he doesn’t get to hang out with as much since he moved out a couple of years ago. Nathan’s story continues on page 34.

Meet Carmen.

Carmen is a 22-year-old college student living in a house on the outskirts of campus. Carmen has two roommates, neither of whom she knows very well. The fall semester recently got underway, and she’s already feeling a bit lonely and homesick. One thing she has to look forward to is her boyfriend of exactly six months—not counting the one week apart last month after they had a big fight—visiting town to stay with her for the weekend. Living in different towns has put a strain on their relationship, but Carmen is hoping that this weekend will bring them closer together. Carmen’s story continues on page 24.
“The day is too short sometimes, like especially when I have to work at 4:00 p.m. I get out at 9:30 p.m., have to do my homework, take a shower, and wake up at 6:00 in the morning and start again. You don’t have enough time for yourself, to take care of yourself.”

16-YEAR-OLD FEMALE
Access to care refers to the capability of adolescents to receive needed health care from providers skilled in the care of this age group. Access to care depends on such things as the availability of public transportation to and from a health care provider, the location (proximity) of a provider’s office in relation to an adolescent’s home, the cost of services, and the hours of operation (whether appointments are available before and after school hours or on the weekend).

Adolescents are among those least likely to have access to health care, and they have the lowest rates of primary care of any age group in the United States (Klein et al., 2007). Adolescents have a unique set of health care needs, due to developmental changes, dependency on adults, different diseases from adults (often not chronic), and demographic trends (living in poverty or in single-parent homes). The preventable health problems of adolescents make specific screening and counseling services important for this population. Reducing risk behaviors has great potential for decreasing preventable adolescent and adult morbidity and mortality, and primary-care providers and health insurance can play a critical role in preventing adverse outcomes and promoting healthy lifestyles among adolescents.
Remember Michelle?

Mom accompanies Michelle to the doctor’s, but stays out in the waiting room during the exam. Mom thinks that Michelle will be more open without her mother standing in the room. Michelle wants to tell her doctor that she has been feeling sad and stressed out for weeks now, but she is afraid that the doctor may say something to her mom. The doctor talks with Michelle about the importance of sleep and exercise, same as always. But this time, when he asks about her eating habits, Michelle breaks out into tears and ends up telling him about the teasing at school. The doctor tells Michelle that he’s concerned about her mental health and recommends she see a psychologist for depression. Michelle can’t believe the doctor thinks she has “mental health problems” and quickly decides she will not mention anything to her mom about the doctor’s recommendation. To follow Michelle’s story and learn about other health issues affecting adolescents, see page 28.

Current Picture

Adolescence is an exciting time of transition in which young people develop the capacity for self-care and decision making, gain a sense of identity, and expand their educational, occupational, and social worlds. Despite this emerging independence, adolescents remain strongly connected to—and still very much in need of assistance from—their parents, families, schools, communities, and health care professionals to support healthy decisions while reducing risky behaviors.

“I’m terrified of doctors. I won’t go, and half the time it’s because I tell them I can’t take pills and then they prescribe me ten pills. Some of them are just rude. Like they don’t believe what you say because of your age.”

—18-YEAR-OLD FEMALE

Health care providers are in an extraordinary position to support healthy adolescent development. Adolescents are newly learning health-related behaviors and are often open to new ideas and approaches. Thus, health care providers have the opportunity to influence adolescents’ knowledge, attitudes, and behaviors by providing accurate information and appropriate referrals. Yet health care providers also face challenges when caring for adolescents. Some providers are simply reluctant to serve this population because they may lack education on how to support adolescents, because they buy into the myths that adolescents do not want to listen to adults or persons of authority, or because they do not know how to address adolescent behaviors that cause the majority of morbidity, injury, and mortality among this population. Additionally,
providers must be able to supply adolescents (and their parents/guardians) with age-appropriate educational materials. Another hurdle to effective communication between a health care provider and an adolescent patient is maintaining the balance between providing the confidentiality that adolescents desire [see Figure 3], and fulfilling their responsibility to parents.

**Figure 3: Confidential Health Care for Adolescents**
*Source: American Medical Association, 2000.*

![Figure 3: Confidential Health Care for Adolescents](image)

Compared with students nationally, Indiana high school students are more likely to use tobacco, be sexually active, and consider suicide (Centers for Disease Control and Prevention [CDC], 2007b). Tracking risk behaviors such as these among adolescents can provide an indirect measure of the quality and quantity of health and preventive care they receive. Despite knowing what adolescents need in regard to health care, many Hoosier health care providers do not offer screening or preventive counseling at rates consistent with national guidelines and organizational recommendations (Committee on Adolescent Health Care Services [CAHCS], 2008). Thus, despite wanting to discuss risk behaviors with their health care providers, many adolescents do not have the opportunity to do so (Thrall et al., 2000).

Health care providers have many occasions to influence adolescents to engage in health-promoting and -protecting behaviors. For this reason, we must strive to connect health care providers with opportunities to learn and/or improve upon skills to interact with and provide health care services to adolescents, within the context of increasing demands for their time.

How can we help adolescents like Michelle?

**Changing the Picture**
Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to, either in your own family or in your community.

- Educate health care providers, including staff of school-based clinics, on adolescent-appropriate services and screenings.
- Educate health care providers, including staff of school-based clinics, on confidentiality and consent.
• Educate health care providers on the appropriate use of coding to facilitate reimbursement for services provided.
• Improve health care providers’ skills in interviewing adolescents.
• Make clinic and office environments more adolescent-friendly (for example, offering weekend and after-school hours, age-appropriate literature, affordable fees, and staff who respect young people).
• Educate health care providers about the importance of collaboration and communication with other providers.

Equation for Success
Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of increasing the quality of health care that providers offer to adolescents. As you study the logic model, ask yourself where you fit into the equation.
### Recommendations

- Provide training and tools to educate health care providers on adolescent-appropriate services and screenings.
- Provide training and tools to educate health care providers on confidentiality and consent, as they relate to adolescent patients.
- Provide training and tools for health care providers to improve their interviewing techniques with adolescents.
- Provide training and tools for health care providers on coding to facilitate reimbursement.
- Educate health care providers about the importance of collaboration and communication with other providers.
- Provide opportunities for health care workers and related professionals to interact.
- Provide the training and tools to encourage health care providers to offer a more adolescent-friendly environment.

### Skills, Knowledge, & Attitudes

- Increased knowledge of adolescents’ unique health care needs, including consent and confidentiality.
- Increased sensitivity to adolescents’ concerns and communication styles.
- Improved skills in eliciting information from and providing information to adolescents.
- Better understanding of methods for coding for patient reimbursement.
- Increased value placed on communication and collaboration with other health care providers.
- Increased awareness of opportunities for communication and collaboration with other providers.
- Higher value placed on a health care environment that is supportive of adolescent health and development.
- Understanding of the factors that make a health facility “adolescent friendly”.

### Behaviors

- Health care providers adopt policies and procedures to ensure that common adolescent health care needs are addressed.
- Health care providers increase screening and services provided to adolescents.
- Health care providers conduct more effective interviews with adolescent patients.
- Health care providers have more frequent discussions with adolescent patients and their parents/guardians.
- Health care providers use appropriate coding for cost reimbursement.
- Health care providers charge lower out-of-pocket fees to adolescent patients.
- Higher number of health care providers communicate and collaborate with each other.
- Health care providers offer after-school and weekend hours.
- Health care providers offer age-appropriate materials to adolescent patients.
- Health care providers offer affordable fees and/or payment plans for adolescents.
- Health care providers and staff show adolescent patients greater respect.

### Goal:

Increase the quality of health care that providers offer to adolescents.
HEALTH INSURANCE: Increase the Number of Adolescents Enrolled in Public and Private Health Insurance

Remember Carmen?
Mark and Carmen have been dating for six months now, and they have started to talk about having sex. Carmen has a feeling it might happen when Mark comes to visit her this weekend. She had planned to go to her family doctor to have her first pelvic exam and talk about contraception, but she discovered that she can’t afford the office visit since her parent’s insurance policy dropped her when she turned 21. To follow Carmen’s story and learn about other health issues affecting adolescents, see page 42.

Current Picture
In our society, the ability to access the health care system is oftentimes dictated by the availability of insurance coverage that provides the financial resources to pay for health care. Too many adolescents are prevented from receiving necessary preventive care and treatment due to lack of insurance coverage. If we want adolescents to develop good health habits and access the care and advice that will lead to long-term well-being, providing insurance coverage that allows them access to high-quality professionals and facilities is a must.

“When I was a kid, I was on Medicaid, and when I turned 18, I didn’t have it anymore. I mean, if I go to the doctor, I pay. So most of the time I’m sick, I don’t go to the doctor.”

—19-YEAR-OLD FEMALE

Health insurance coverage is important for promoting health, preventing disease, and treating illness. Compared to those who are insured, uninsured adolescents are more likely to be without a usual source of care, without a primary care physician, without needed dental care, and without needed mental health care. Uninsured individuals are more likely to use emergency rooms and urgent-care centers for non-urgent medical needs (CAHCS, 2008). This behavior diverts emergency resources away from truly urgent medical cases, and results in significantly more costly care than that received in primary-care settings.

Not only is a large portion of the adolescent population without any health insurance, but the proportion of adolescents with private health insurance is also declining (NAHIC, 2008). It is known that health insurance coverage declines between adolescence and emerging adulthood; adolescents ages 18–
24 are nearly three times more likely to be uninsured anytime in the past year than adolescents ages 12–17 (NAHIC, 2008) (see Figure 4). Older adolescents and emerging adults are particularly at risk for being uninsured. They are often too old to be covered on family insurance policies, and too early on in their career paths to have full-time employment with health care benefits. This problem leaves them without needed preventive medical care and treatment for physical and psychological illness. One out of every five uninsured emerging adults has had no preventive care in the last two years, and one out of every ten has had no preventive care in the last five years (CDC, 2006a).

Medicaid and the Children’s Health Insurance Program (CHIP) provide needed medical insurance coverage to many. However, many adolescents who are eligible for these insurance programs are simply not enrolled. Two-thirds of uninsured 10- to 18-year-olds are eligible for Medicaid or CHIP coverage. One-fifth of uninsured 19- to 21-year-olds—including adolescents with certain medical conditions, specific family circumstances, or poverty—are eligible for Medicaid through state-specific optional-coverage groups (Fox, Limb, & McManus, 2007). Maximizing utilization of these existing insurance programs can dramatically decrease the proportion of adolescents who are uninsured, and can reduce the drain on financial and medical resources that is a result of uninsured individuals.

**One in six adolescents has special health care needs, and these adolescents use health care services more often than peers who do not have such needs. Of those with special health care needs, nearly 20% go without needed health care services (NAHIC, 2008).**

In addition to increasing the number of eligible adolescents who enroll in insurance programs, we can also advocate for more (and more affordable) health insurance options to be made available to adolescents, whether by private or public entities. Health insurance is an investment in adolescents’ health.
health that will yield financial as well as social returns. Whenever possible, we must make the effort to connect adolescents with health insurance coverage in order to minimize health risks and related costs.

How can we help adolescents like Carmen?

Changing the Picture
Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one[s] you are able to implement or contribute to either in your family or in your community.

- Educate adolescents, their families, their health care providers, and other agencies that serve them about insurance options (such as Medicaid, CHIP, Healthy Indiana Plan [HIP], private insurance, and Indiana’s Children’s Special Health Care Services [CSHCS], a supplemental program that helps families of children with serious chronic medical conditions pay for treatment related to their child’s condition).
- Simplify the application process for government-sponsored insurance.
- Advocate for insurers to lengthen the duration of insurance coverage.
- Advocate for more insurance options, whether private or government sponsored, for adolescents.

Equation for Success
Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of increasing the number of adolescents enrolled in public and private health insurance. As you study the logic model, ask yourself where you fit into the equation.
### Recommendations

- Educate adolescents and their families about insurance options available to them
- Discuss and facilitate insurance coverage as part of every school enrollment, employment process, and health care encounter
- Train staff in health care facilities, youth-serving organizations, and schools to determine eligibility and assist with insurance enrollment
- Educate adolescents and their families about the importance of health insurance and routine health care for promotion of health and prevention of illness
- Simplify the paperwork required for insurance enrollment and renewal of insurance coverage
- Advocate for insurers to lengthen the duration of insurance coverage periods
- Advocate for more insurance options, whether private or government sponsored, for adolescents

### Skills, Knowledge, & Attitudes

- Increased knowledge and understanding of adolescents’ insurance options and eligibility criteria
- Increased motivation among adolescents to obtain/maintain health insurance coverage
- Increased ability of adolescents or their parents/guardians to successfully apply for insurance

### Behaviors

- Eligible adolescents enroll in insurance plans
- Insurance companies offer longer coverage periods, allowing insured adolescents to maintain continuous coverage
- Private and public agencies recognize the demand for adolescent insurance options
- More (and more affordable) health insurance options are offered to adolescents

### Goal:

**Increase the number of adolescents enrolled in public and private health insurance**
Mental Health Services: Increase Mental Health Services for Adolescents

Remember Michelle?

Another week has gone by, and Michelle is still moping around the house. Mom confronts Michelle and she opens up about the teasing that has been going on at school and all the stress she’s been feeling lately. She even tells her mom about the doctor’s recommendation to see a psychologist. Michelle’s mom listens very closely to her daughter and is willing to do anything she can to help her. She doesn’t want her daughter to feel that there is something very wrong with her or let her think that going to a psychologist means she is crazy. Michelle’s mom says she will make an appointment for her and they can go together. Now Mom is feeling concerned because the appointments could be costly, and she’s not sure whether her health insurance will pay for it. To follow Michelle’s story and learn about other health issues affecting adolescents, see page 50.

Current Picture

While the majority of adolescents are physically healthy, they have a high prevalence of mental health problems. Nationally, one in five adolescents experiences significant symptoms of emotional distress, and one in ten experiences more serious mental health problems (Knopf, Park, & Mulye, 2008). The most common mental health problems among adolescents are depression, anxiety, attention-deficit/hyperactivity disorder, substance-use disorder, and eating disorders (Knopf et al.). In Indiana, 21% of 18- to 24-year-olds feel that their mental health is “not good” on seven or more days each month (Indiana State Department of Health [ISDH], 2009). Among Indiana’s high school students, 27.5% reported at least two weeks in the past year when daily sadness or hopelessness was so severe that they stopped doing some usual activities (CDC, 2007a). Even though primary care providers report that mental health problems are a significant part of their practice (Knopf et al.), over one-third of adolescents ages 12–17 do not receive needed mental health services (NAHIC, 2008).

Mental Health is the successful performance of mental functions resulting in productive activities, fulfilling relationships with other people, and the ability to change and to cope with adversity (Knopf et al., 2008).
Adolescents with better mental health are physically healthier, demonstrate more socially positive behaviors, and engage in fewer risky behaviors. Conversely, adolescents with mental health problems, like depression, are more likely to engage in health-risk behaviors. Half of mental health problems diagnosed in adults start by age 14, and three-fourths by age 24 (Knopf et al., 2008). Investing in the mental health of adolescents is cost effective; research has shown that providing mental health care that is equal to physical health care can decrease costs by nearly 70% among children and adolescents. Despite this, insurers in Indiana are not required to provide mental health coverage, and plans that do cover mental health care often do not cover common adolescent mental health problems (Kirschstein, 2000).

“Our emotional health...we’re in college, we’re doing a lot of work, we’re growing as, you know, young adults, trying to identify who we are, we’re learning about bills, finances, credit cards, all this other stuff, and it just becomes extremely overwhelming. And then summer happens, and then maybe, if you’re lucky, you can relax a little, but I know a lot of people end up working just as hard.”

—20-YEAR-OLD MALE

Adolescents may be reluctant to discuss “mental health problems” because of the stigma often associated with this term, but many express such problems in terms of “stress.” Stress is a common experience during adolescence, making it easier to discuss with friends, family, and health care providers. Teaching adolescents, families, communities, health care providers, and others about the prevalence and symptoms of mental health problems and adolescent “stress” can help to remove the stigma. It is important for Hoosier adolescents and the adults who care for them to promote mental health and advocate for screening and affordable treatment for mental health problems.

How can we help adolescents like Michelle?

Changing the Picture
Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one[s] you are able to implement or contribute to either in your family or in your community.

- Educate adolescents and parents/guardians on when and how to seek mental health services.
- Educate adolescents, parents/guardians, school professionals, and health care providers to recognize mental health needs of adolescents.
• Educate school professionals and health care providers about appropriate referrals for adolescents with mental health conditions.

• Advocate for decreasing the number of allowable mental health exclusions (such as eating disorders, substance abuse, and suicide attempts) within health insurance plans.

• Advocate for parity in insurance benefits between physical health care and mental health care.

• Promote health insurance coverage for adolescents.

**Equation for Success**

Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of increasing mental health services for adolescents. As you study the logic model, ask yourself where you fit into the equation.
### Recommendations

- Educate adolescents and families about the importance of mental health for promotion of overall health and prevention of illness
- Educate adolescents and families to recognize common mental health warning signs
- Educate adolescents and their families on the process and options for receiving mental health services
- Provide an updated list of local, adolescent-friendly mental health care referrals to schools, health care facilities, religious organizations, and other agencies that work with adolescents
- Collaborate with adolescents, families, youth-serving organizations, and insurers to advocate for mental and physical health care to be insured equally (parity of coverage)
- Advocate for decreasing the number of allowable mental health exclusions (such as eating disorders, substance abuse, and suicide attempts) within health insurance plans
- Train health care providers to recognize and treat common mental health conditions in adolescents (see priority “Health Care Capacity”)
- Promote health insurance coverage for adolescents (see priority “Health Insurance”) **

### Skills, Knowledge, & Attitudes

- Increased value placed on mental health and mental health care
- Increased comfort with speaking about mental health concerns
- Increased understanding among adolescents and their families about when to seek mental health care
- Increased understanding among adolescents and their families about how to seek mental health care
- Increased familiarity among professionals who work with adolescents about available mental health resources
- Increased public support for mental health care for adolescents
- Increased recognition among insurers (both public and private) of the demand for, and benefits of, covering mental health care for adolescents
- Increased knowledge among health care providers of warning signs of adolescent mental illness
- Increased ability among health care providers to communicate with adolescents about their mental health
- Improved ability among health care providers to treat mental illness in adolescents
- Increased value placed on health care coverage among adolescents and their families

### Behaviors

- Families and community members speak openly with adolescents about stress, depression, and other mental health issues
- Increased numbers of adolescents seek out mental health care
- Insurance programs cover mental and physical health care equally (parity of coverage)
- Insurance programs decrease the number of allowable mental health exclusions
- Health care providers increase screening for and treatment of mental illness among adolescents
- Increased numbers of adolescents enroll in public or private health insurance

### Goal:
**Increase mental health services for adolescents**
“For a lot of households, it’s not a ‘be responsible, be smart’; instead, it is a ‘don’t, just don’t.’ We need the messages that say ‘be responsible, be smart.’”

18-YEAR-OLD MALE
Adolescence is a period during which we establish behaviors that have both an immediate and a long-term impact on our health. Health-enhancing behaviors (such as physical activity, healthy eating habits, and connectedness with significant adults) promote good health, while health risk behaviors (such as binge drinking, smoking, unprotected sexual activity, overeating, or sedentary lifestyle) can lead to serious health problems that may not appear until adulthood.

The following priority issues focus on assisting adolescents in choosing healthy behaviors and avoiding behaviors associated with short- and long-term poor health. We believe that prevention is key. By addressing these issues, our community can significantly decrease injuries, illness, and death among Hoosier adolescents now and into their adulthood.
**Binge Drinking**: Decrease the Proportion of Adolescents Who Engage in Binge Drinking

**Remember Nathan?**

On Saturday afternoon, Nathan drives across town to his older brother’s apartment to celebrate his scholarship. While Nathan, his brother, and one other friend, Tim, watch the Colts game, they polish off a case of beer. Shortly after finishing his last beer, Nathan throws up and feels awful. To follow Nathan’s story and learn about other health issues affecting adolescents, see page 38.

**Underage drinking costs Indiana $1.3 billion each year** (Miller, Levy, Spicer, & Taylor, 2006).

**Current Picture**

In the process of development, especially as they strive to gain competence in social situations, adolescents “try on” many of the behaviors they see adults exhibit. In many cultures in our society, consuming alcoholic beverages is an integral part of social settings and occasions. Many adults choose to drink alcoholic beverages responsibly without crossing the line into problem drinking. Part of becoming a mature and competent adult is avoiding alcohol altogether or learning how to drink in moderation and act responsibly while drinking.

“You can tell them it’s better to just not [drink], but I think the best way, especially in our generation, is to teach them how to be safe...not to do stupid stuff.”

—16-YEAR-OLD MALE
Adolescents’ inexperience often leads them to cross the line into the unhealthy consumption of alcoholic beverages. Far from being a way to socialize, alcohol becomes a damaging way to cope with pressure or a way to appear “grown up” to peers. Adolescent drinking is often a misguided attempt to gain confidence or a feeling of self-worth in social situations, yet it frequently has the opposite effect.

Although it is illegal for them to do so, three-quarters of Hoosier high school students report having used alcohol (CDC, 2007a). Alcohol consumption, including binge drinking, is the most common type of substance use among adolescents. Despite efforts to reduce alcohol consumption among adolescents, adolescents still view it as a normal, expected, and socially acceptable form of substance use (Hughes, Sathe, & Spagnola, 2008).

Hoosier adolescents perceive binge drinking as less risky compared to the average adolescent in the United States (NAHIC, 2007a). Up to half of emerging adults report binge drinking (NAHIC, 2007a), and nearly 30% (28.2%) of Indiana high school students report binge drinking on one or more of the past 30 days (CDC, 2007a). Further, 43.9% of Indiana high school students report having had at least one alcoholic drink on one or more of the past 30 days (CDC, 2007a) [see Figure 5]. Binge drinking is most common among older adolescents and emerging adults. Rates of use are similar across races and genders, but nearly triple from adolescence to emerging adulthood (Hughes et al., 2008).

**Figure 5: Alcohol Use Among Hoosier Adolescents**

*Source: CDC, 2007a.*

Binge drinking is a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to .08 gram percent or above. For the typical adult, this pattern corresponds to having five or more alcoholic drinks for men and having four or more alcoholic drinks for women in a two-hour time period (National Institute on Alcohol Abuse and Alcoholism, 2004).
There are human and economic consequences associated with alcohol and other substance use. Binge drinking among adolescents (or any alcohol consumption among minors) is associated with poor decision making. It is also linked to injuries and death resulting from motor vehicle crashes, falls, drowning, and alcohol poisoning, and to chronic (and sometimes fatal) illnesses such as liver damage and hypertension. Over a quarter (26.4%) of Hoosier high school students reported riding in a car with a driver under the influence of alcohol in the past 30 days, and 11.9% reported driving one or more times in the past 30 days while they were under the influence of alcohol (CDC, 2007a). Binge drinking can also lead to increased violence, including suicide and use of firearms. Yet, despite these grave costs, the majority of adolescents who are dependent on or abuse alcohol and illegal substances do not receive treatment (NAHIC, 2007a).

Supporting adolescents in their decision to refuse to engage in binge drinking can not only increase their self-efficacy, but also allow them to explore other skills and interests. As individuals and communities, we must provide adolescents with support, examples of responsible behavior, and alternative options to spend their time in a productive and creative manner.

How can we help adolescents like Nathan?

**Changing the Picture**

Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to either in your family or in your community.

- Educate adolescents and parents/guardians about the health and safety dangers of binge drinking.
- Model responsible drinking behaviors for adolescents to emulate, such as drinking in moderation or avoiding alcohol altogether.
- Provide alcohol-free events and activities that appeal to adolescents.
- Screen adolescents for alcohol abuse or dependency and provide treatment opportunities as needed.
- Enforce and/or increase penalties for provision or sale of alcohol to minors.
- Enforce alcohol-free campus policies.

**Equation for Success**

Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing the proportion of adolescents who engage in binge drinking. As you study the logic model, ask yourself where you fit into the equation.
**Recommendations**

- Encourage and provide opportunities for healthy socialization and recreation that is alcohol-free
- Model responsible drinking behaviors for adolescents to emulate, such as drinking in moderation or avoiding alcohol altogether
- Increase mental health services and substance abuse treatment for adolescents (see priority “Mental Health Services”)
- Educate adolescents and parents/guardians about the health and safety dangers of binge drinking
- Enforce laws prohibiting alcohol sales to minors
- Advocate for and enforce alcohol-free campus policies

**Skills, Knowledge, & Attitudes**

- Decreased social pressure, desirability, and acceptability of binge drinking among adolescents
- Increased interest in and awareness of social and recreational activities that do not involve drinking
- Increased understanding among adolescents of what it means to be responsible about alcohol
- Increased willingness and ability to seek treatment for alcohol abuse
- Increased awareness of harmful outcomes of binge drinking
- Decreased access to alcohol
- Decrease in perceived social pressure to drink

**Behaviors**

- Delayed onset of alcohol consumption
- Decreased amounts of alcohol consumed by adolescents
- Adolescents ages 21+ are more responsible in their alcohol consumption

**Goal:**

*Decrease the proportion of adolescents who engage in binge drinking*
CIGARETTE SMOKING: Decrease Cigarette-Smoking Rates Among Adolescents

Current Picture
Adolescents often attempt to stretch the limits and try on what they perceive to be adult behaviors in an attempt to be seen as “with it,” “cool,” or even rebellious against rules and regulations established by adult authorities. Smoking cigarettes is one such behavior that many adolescents try on. Unfortunately, mass marketing has led many adolescents to believe that smoking is a way to express their individuality. Despite the many warnings to the contrary, they believe that they will not become addicted or be harmed—that such things only happen to “the other guys, not to me.”

Tobacco companies spend over $425 million each year in Indiana on marketing and promotion, much of which targets and seeks to influence adolescents to smoke (U.S. Federal Trade Commission, 2007).

Cigarette smoking is the most common form of tobacco use in Indiana, but the use of other tobacco products—including cigars and smokeless tobacco—is on the rise. Whether this concerning trend will persist remains to be seen. Though beyond the scope of this plan, the use of these other tobacco products carries its own set of detrimental health effects and warrants prevention measures of its own.

Although smoking will likely not kill a person as an adolescent, as an adult, one’s smoking status is a contributing factor to quality of life and cause of death. Smoking is a significant risk factor for cancers, heart diseases, and strokes, which are the leading causes of death in Indiana. Besides these long-term effects that tend to show up in adulthood, tobacco use also produces specific health problems for adolescents, such as irritated eyes and throat, increased illness, tooth decay, gum disease, and reduced immune function. Another important reason to decrease smoking rates...
among adolescents is that cigarette smoking is considered a gateway drug that leads to more destructive, addictive behaviors. Preventing adolescents from smoking cigarettes is one way to decrease the likelihood that they will use other harmful substances and engage in other risky health behaviors.

“[Adolescents] take their stress out on other things. Make themselves feel better. That’s why people smoke. Take your stress away. Yeah, but then it becomes a habit, and then you mess up your life ‘cause, uh, maybe you could have prevented this.”

—17-YEAR-OLD MALE

Evidence shows that a smoking addiction is far more difficult to kick than often imagined. Over half (55.8%) of Indiana high school students who reported current cigarette use tried to quit smoking during the past 12 months (CDC, 2007a). In fact, 90% of all adult smokers began smoking while in their teenage years (Office of the Surgeon General, 1995).

Each year, another 15,000 Hoosier adolescents become daily smokers. Nearly 10% of middle school students and almost one-quarter (22.5%) of high school students in Indiana report current cigarette use (having one or more cigarettes in the past 30 days) (see Figure 6) (Indiana Tobacco Cessation and Prevention, 2007; CDC, 2007a). Of those Indiana high school students who smoke, 15.8% smoke daily and 13.2% smoke more than ten cigarettes per day on the days they smoke (CDC, 2007a). It is known that smoking rates increase with age. In fact, 41.1% of older adolescents and emerging adults (ages 18–24) in Indiana currently smoke (ISDH, 2009).

Indiana spends $7.57 in smoking-related costs for every pack of cigarettes sold here (Campaign for Tobacco Free Kids, 2004).

Figure 6: Cigarette Use Among Hoosier Adolescents
Source: Indiana Tobacco Cessation and Prevention, 2007; CDC, 2007a; ISDH, 2009

1Estimate based on U.S. Health and Human Services “Summary Finding from the 2000 National Household Survey on Drug Abuse,” with Indiana’s share of the national number allocated through the formula in CDC “Projected Smoking-Related Deaths Among Youth–U.S.,” MMWR 45(44); based on state smoking rates.
We know that, during adolescence, young people must take risks in order to learn. However, it is our job to protect them from taking risks, such as smoking, that we know have a high likelihood of leading to lifelong health problems.

How can we help adolescents like Nathan?

**Changing the Picture**

Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to either in your family or in your community.

- Educate adults, adolescents, parents/guardians, and families on prevention and cessation of cigarette use.
- Model healthy behavior by not smoking in front of adolescents and, ideally, quitting smoking altogether.
- Increase the number of smoking cessation programs available to adolescents, parents/guardians, and families.
- Support effective media campaigns to prevent and curtail cigarette smoking among adolescents.
- Advocate for increased smoke-free-air policies.
- Advocate for higher taxes on tobacco products.
- Advocate for enhanced enforcement of laws prohibiting tobacco sales to minors.

**Equation for Success**

Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing cigarette-smoking rates among adolescents. As you study the logic model, ask yourself where you fit into the equation.
**Recommendations**
- Educate adults, adolescents, parents/guardians, and families on prevention and cessation of cigarette use
- Support effective media campaigns to prevent and curtail cigarette smoking among adolescents
- Develop, implement, and enforce smoke-free-air policies
- Model healthy behavior by not smoking in front of adolescents
- Advocate for better enforcement of laws against selling cigarettes to underage adolescents
- Advocate for increased taxation on cigarettes

**Skills, Knowledge, & Attitudes**
- Increased comfort among parents with talking with their children about cigarette smoking
- Increased awareness among adolescents and their families about the harmful outcomes of cigarette smoking, and about ways to quit
- Decreased social pressure, desirability, and acceptability of smoking among adolescents

**Behaviors**
- Decreased perception that smoking is “normal” or acceptable behavior
- Decreased ability of adolescents to acquire cigarettes
- Adolescents view cigarettes as “not worth” the cost or trouble to acquire them

**Goal:**
Decrease cigarette-smoking rates among adolescents

- Higher rates of adolescents refuse to start smoking cigarettes
- More adolescents who already smoke attempt to quit on their own, or through a smoking cessation program
- Fewer adolescents buy cigarettes
**Remember Carmen?**

Ever since she moved away for school, Carmen and her boyfriend Mark have been having more and more arguments. He doesn’t seem to trust her, and wants to know where she is at all times. Mark always ends up yelling at Carmen when they disagree. During an argument last month, he actually shoved her hard enough that she fell. Afterwards, he said he loved her and apologized every day for a week, and so they got back together. Carmen is hoping that they will not have a fight if she decides that she is not ready to have sex when he comes to visit this weekend. To follow Carmen’s story and learn about other health issues affecting adolescents, see page 54.

**Current Picture**

As people grow from small children into adolescents, their world expands to include many relationships with people outside their family. As they mature, adolescents begin to become more independent and spend more unsupervised time with friends and acquaintances. While relationships with parents and family are still very important, peer relationships become increasingly important, as well. Adolescents need guidance as they explore new roles in friendship and dating relationships. They need opportunities to see examples of respectful, healthy communication between adults. In addition, adolescents need a safe and comfortable environment to learn and practice decision-making and assertive-communication skills. They need help from caring adults in processing their actions, thoughts, feelings, and attitudes about relationships.

Violence is a serious problem for adolescents—whether it comes from within their family, among their peers, or in the context of a romantic relationship. This plan focuses on dating violence as an emerging issue within Indiana’s adolescent population. Seventy-two percent of eighth- and ninth-graders reportedly “date”; by the time they are in high school, 54% of students report dating violence among their peers (National Center for Injury Prevention and Control [NCIPC], n.d.).

The results of dating violence can range from bruised self-esteem to broken bones to permanent injury and even death. The three common types of dating violence are emotional, physical, and sexual.

**DATEING VIOLENCE** is the emotional, physical, and/or sexual abuse of one partner by the other in a current or former dating relationship.
• Emotional abuse means threatening a person or harming his or her sense of self-worth, and often involves verbal abuse. Examples include name-calling, teasing, threats, bullying, or keeping one away from friends and family (CDC, 2006b). Those who are being emotionally or verbally abused are often made to feel that their perception of reality is incorrect and that their feelings are wrong or unimportant (Palo Alto Medical Foundation, n.d.).

• Physical abuse occurs when someone is physically hurt, such as by being hit or having something thrown at him or her, even if it happens only once and does not hurt that badly. Abuse tends to escalate, with a greater risk of harm in the future (Palo Alto Medical Foundation, n.d.). Other forms of physical abuse include being pinched, hit, kicked, or shoved (CDC, 2006b). Just one incident of being physically hurt by someone is unacceptable. Nearly 12% (11.6%) of Hoosier high school students reported being hit, slapped, or physically hurt by their boyfriend or girlfriend in the past 12 months (CDC, 2007a).

• Sexual abuse is any sexual act performed without consent (remember that minors are legally incapable of consenting to sexual acts with adults). Sexual abuse can range from showing someone sexually explicit material to making sexual threats to fondling to rape (CDC, 2007b). Nearly 10% (9.4%) of Hoosier high school students reported being physically forced to have sexual intercourse when they did not want to; females were significantly more likely to report such behavior than males (13.2% versus 5.3%), making them 2.5 times more likely to experience this behavior than males (CDC, 2007a).

Young women ages 16–24 experience the highest rates of relationship violence (National Center for Victims of Crime, 2007). Among college students, 32% of students report dating violence by a previous partner, and 21% report violence by a current partner (Dating Violence Resource Center, n.d.). Just over 50% (51%) of college males admit perpetrating one or more sexual assault incidents during college (Dating Violence Resource Center).

One in eleven adolescents reports being a victim of physical dating abuse (CDC, 2006c), and one in five high school girls has been physically or sexually abused by a dating partner (Silverman, Raj, Mucci, & Hathaway, 2001).

Adolescents who are victims of dating violence are more likely than other teens to suffer injury, attempt suicide, do poorly in school, use drugs and/or alcohol, have eating disorders, or engage in risky sexual behaviors that often lead to unintended pregnancy and sexually transmitted infections, including HIV (NCIPC, n.d.; CDC, 2006b). Victims may come to view abuse as a normal
part of their relationships. Victims may remain in an abusive relationship for many reasons, including fear of the perpetrator, self-blame, minimization of the crime, loyalty or love for the perpetrator, social or religious stigma, or lack of understanding (National Center for Victims of Crime, 2007).

Dating violence can prevent an adolescent from growing and learning within healthy relationships. Abusive dating experiences during adolescence may disrupt normal development of self-esteem and body image (NCIPC, n.d.). Adolescents in abusive relationships often carry these unhealthy patterns of abuse into future relationships and become unable to build and sustain healthy relationships.

Respect for others is a value often learned at a young age. Ideally, adolescents will be surrounded by adults and peers alike who can mentor and set an example of what constitutes a healthy, safe relationship.

How can we help adolescents like Carmen?

### Changing the Picture

Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to either in your family or in your community.

- Provide adolescents with structured, educational opportunities to develop skills for building healthy relationships.
- Model healthy communication and problem solving for adolescents.
- Increase screening for dating violence by school guidance counselors, physicians, parents, and peers.
- Provide adolescents with resource information on dating violence.
- Educate adolescents and parents/guardians about the different forms of dating violence, the dynamics of power and control, and the early warning signs of an unhealthy relationship.
- Incorporate screening adolescent patients for dating violence into reproductive health care, and train providers of reproductive health care to refer patients to relevant resources in the local community.

### Equation for Success

Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing the prevalence of dating violence among adolescents. As you study the logic model, ask yourself where you fit into the equation.
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**Goal:**
Decrease the prevalence of dating violence among adolescents
Remember Nathan?

Although it was somewhat early in the evening, Nathan’s brother was ready to call it a night, since he had to work the next day. Nathan was shocked to learn that Tim had driven himself home after drinking so much. With Nathan’s parents expecting him home that night, he had to make a decision on how he was going to get there: drive himself (after all, Tim drove), or call his parents and [gulp!] admit that he’d been drinking and would have to spend the night with his brother.

Current Picture

Obtaining a license to drive is one of the clearest rites of passage for adolescents in our society. After years of depending upon others to take them all the places they need and want to go, adolescents now have the ability and freedom to do so themselves. Although they may demonstrate the needed skill and knowledge to drive, adolescents still lack the experience that is gained by actual driving under a variety of circumstances. This lack of experience, too often coupled with alcohol or other impairing substances and with lack of seat-belt use, results in young drivers being disproportionately involved in serious motor vehicle crashes.

Motor vehicle crashes account for the largest portion of fatality among U.S. adolescents. Of adolescent deaths due to unintentional injury, seven out of ten involve motor vehicle crashes (NAHIC, 2007b). The 16–24 age group has a fatal-collision-involvement rate at least 1.6 times greater than any other age group. The 16–17 age group represents the lowest percentage of licensed drivers, and yet has the highest rate of licensed drivers involved in both fatal and all collisions. Males ages 15–19 have the highest fatality rate of all age groups. Males are 1.5 times more likely than females to have been speeding leading up to a collision, and males are killed in traffic collisions at a rate nearly three times that of females (Lisby, Nagle, Newby, Nunn, & Sapp, 2008).

Use of seat belts is the single most effective means of reducing fatal and nonfatal injuries in motor vehicle crashes. Seat belts can reduce crash mortality by 50% or more [Briggs, Lambert, Goldzweig, Levine, & Warren, 2008]. In a national survey, 59% of high school students reported always wearing a seat belt while driving, but only 41.9% reported doing so when a passenger, and only 38.4% reported using seat belts as both a passenger and driver (see Figure 7) [Briggs et al.]. In Indiana, nearly 10% (9.2%) of high school students reported never or rarely wearing a seat belt (CDC, 2007a). Adolescents with the highest non-restraint use rates were 19-year-olds (80%), 21-year-olds (80%), and 22-year-olds (83.3%) [Briggs et al.]. Over 60% (61.9%)
of young drivers killed in traffic collisions were not restrained. If involved in a collision, a driver of a vehicle was 37.5 times more likely to have been killed if unrestrained than a driver who was restrained (Lisby et al., 2008).

Driving while under the influence of alcohol greatly increases the likelihood of crashing, and failure to wear a seat belt can increase the severity of injury. Students most likely to report inconsistent seat-belt use regardless of driver or passenger status were those who drove after drinking and those who rode with a drinking driver. Students who reported drinking and driving were less than one-third as likely to buckle up while driving as their counterparts who did not drink and drive (Briggs et al., 2008). Students who rode with drinking divers were less than half as likely to buckle up as students who did not ride with drinking drivers (Briggs et al.). Among students who reported either drinking and driving or riding with a drinking driver, only about one-fourth always buckled up as passengers (Briggs et al.). Over a quarter (26.4%) of Hoosier high school students reported riding in a car with a driver under the influence of alcohol in the previous 30 days; 11.9% reported driving one or more times in the previous 30 days while they were under the influence of alcohol (CDC, 2007a). For both males and females, the age group at highest risk of alcohol-involved fatalities or injuries was 20- to 24-year-olds.

Another risk factor for all drivers, but especially for inexperienced adolescent drivers, is driving with distractions. Common distractions include talking on the cell phone, texting, grooming, eating or drinking, listening to loud music, and interacting with passengers, animals, or objects in the car. All of these activities take attention away from the road and reduce a driver’s alertness and reaction time.

Investing in the driving experience of adolescents should not stand alone. Education needs to emphasize the consequences—including death—of not wearing a seat belt, of speeding, of driving under the influence of alcohol or other impairing substances, and of multitasking while driving. Reminding adolescent drivers to wear a seat belt, watch their speed, avoid distractions while driving, and use a designated driver when necessary (and modeling this same behavior yourself) can help to reinforce the need for more careful, cautious driving and create safer roadways for all.

How can we help adolescents like Nathan?
Changing the Picture

Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to either in your family or in your community.

- Advocate for comprehensive graduated driver’s licensing (a learner’s permit, an intermediate driver’s license, and a full license—all requiring a minimum age, waiting period, skills test, and number of hours of supervised driving to obtain).
- Advocate for seat-belt laws that apply to all occupants of all vehicles.
- Advocate for laws that prohibit distracted driving (such as use of cell phone or text messaging while driving).
- Support and educate designated drivers (those who remain sober in order to drive others who have been drinking).
- Model responsible driving, including wearing your own seat belt, avoiding distractions while driving, obeying the speed limit, and never driving under the influence of alcohol or other impairing substances.
- Promote parent-teen driving agreements to ensure that driving privileges and responsibilities are developmentally appropriate.

Equation for Success

Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing adolescent deaths resulting from motor vehicle crashes. As you study the logic model, ask yourself where you fit into the equation.
**Recommendations**

- Develop and implement peer education and youth development programs to encourage responsible, safe driving practices.
- Model safe, responsible driving habits for adolescents.
- Advocate for laws banning the use of cell phones (and similar devices) while driving.
- Enforce seat-belt laws, and advocate for laws requiring seat belts for all motor vehicle occupants.
- Advocate for comprehensive graduated driver’s licensing.
- Increase the amount of time parents spend in the car while teens are driving.
- Promote parent-teen driving agreements.
- Promote and support the use of designated drivers.
- Promote the development of mass transportation.
- Encourage parents to talk with their children about how to get home safely if they (or one of their friends) has been drinking.

**Skills, Knowledge, & Attitudes**

- Increased knowledge among adolescents of safe driver and passenger practices.
- Increased respect among adolescents for automobile safety.
- Increased adolescent comfort with and acceptance of safety habits, such as wearing a seat belt, obeying speed limits, and avoiding distractions.
- Increased understanding among adolescents of the dangers of, and alternatives to, driving under the influence.
- Increased confidence among adolescents to refuse to ride with a driver who has been drinking.
- Increased comfort among adolescents with using alternatives such as a designated driver or public transportation.

**Behaviors**

- Higher rates of adolescents use a seat belt while driving or riding in a motor vehicle.
- Young drivers decrease or eliminate cell-phone use and texting while driving.
- More young drivers obey the speed limits and other traffic laws.
- More adolescents refuse to ride in a motor vehicle with someone who has been drinking alcohol.
- More adolescents consistently avoid driving after drinking alcohol.
- More adolescents use a designated driver or public transportation if necessary.

**Goal:**

*Decrease the number of adolescent deaths resulting from motor vehicle crashes*
**OBESITY**: Decrease the Prevalence of Overweight and Obesity Among Adolescents

**Remember Michelle?**

Michelle has gone to see the psychologist a few times and is glad to have someone to talk to, but she still dreads walking the halls at school for fear of continued teasing about her weight. She wishes she could be thin like the popular girls at school and the models in magazines. She’s tried all the latest diets, but she never seems to be able to keep the weight off. To follow Michelle’s story and learn about other health issues affecting adolescents, see page 58.

**OVERWEIGHT** is defined as being at or above the 85th percentile, but below the 95th percentile, for body mass index by age and sex. Obesity is defined as being at or above the 95th percentile for body mass index by age and sex (CDC, n.d.-b).

**Current Picture**

Almost 14% (13.8%) of Indiana high school students are obese, and another 15% are overweight (CDC, 2007a). Being overweight often results in lower self-esteem and a reduced overall quality of life. In addition, many illnesses are associated with being overweight, including heart disease, type 2 diabetes, high blood pressure, joint pain, depression, and gastrointestinal disorders.

“The school should, like, enforce more nutrition. They [school teachers, administrators] say, ‘Oh, you guys can’t buy soda,’ but there are soda machines everywhere. Why would they have them if they don’t want us to buy them?”

—16-YEAR-OLD FEMALE

The cause of overweight and obesity among adolescents is complex, considering the many factors that influence weight: physical activity, nutrition, psychological and social influences, genetics, and cognitive development. The more simplistic underlying concept, however, is that maintaining a healthy weight involves creating a balance between the energy consumed through food and the energy expended through physical activity. More specifically,
people gain weight when they consume more energy than they expend. Subsequently, while all factors need to be acknowledged, it is clear that the major components contributing to overweight and obesity among adolescents involve poor nutrition and the lack of physical activity.

With regard to poor nutrition, only 16.7% of Indiana high school students drank three or more glasses of milk per day, and 18.2% ate fruits and vegetables five or more times per day (CDC, 2007a) (see Figure 8). In place of nutritious foods—such as fruits, vegetables, and milk (or a nondairy equivalent, such as soymilk)—adolescents tend to eat less-healthy foods that are higher in fat and calories and lower in nutrients. This behavior translates to over-consumption and, potentially, to weight gain.

When considering lack of physical activity, bear in mind that less than half (40.2%) of Indiana high school students attended physical education classes on one or more days in an average week (CDC, 2007a). Almost one-quarter (20.9%) played video or computer games or used a computer for non-school work three or more hours per day on an average school day (CDC, 2007a). Almost 30% (28.7%) watched three or more hours per day of TV on an average school day (CDC, 2007a) (see Figure 9). Lack of physical activity translates into less energy expenditure, which can ultimately result in weight gain.

To reduce the prevalence of adolescent overweight and obesity, the public health message is centered on the importance of improving nutrition and increasing physical activity. Families, communities, educators, and health care providers play an important role in helping adolescents understand behaviors that contribute to being overweight, and find creative ways to implement
healthier behaviors. The doors of possibility are open as you begin to explore how you can help change the picture of adolescent overweight and obesity in Indiana.

How can we help adolescents like Michelle?

**Changing the Picture**

Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to either in your family or in your community.

- Require all schools to provide daily K–12 physical activity and physical education.
- Educate families about the benefits of good nutrition, increased physical activity, and reduced “screen time” (such as the use of television, computers, and sedentary games), and provide training on proper nutrition for adolescents, including meal preparation techniques.
- Provide nutritious meals and snacks for adolescents, and reduce the availability of high energy dense foods, such as those that are high in sugar or fat and low in water or fiber.
- Offer a wide variety of physical activities for adolescents to participate in, and work with them to find one or more that they enjoy.
- Establish or advocate for a built environment (planned and constructed surroundings) that encourages and facilitates adolescents’ physical activity, including parks with adolescent-friendly features such as skateboard ramps, basketball courts, fields, and walking paths.
- Support healthy-lifestyle media campaigns, including age-appropriate educational materials for adolescents, to address nutrition and physical activity (and to counter ubiquitous fast-food campaigns).
- Facilitate referrals for overweight and obese adolescents to services for weight management.

**Equation for Success**

Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing the prevalence of overweight and obesity among adolescents. As you study the logic model, ask yourself where you fit into the equation.
### Recommendations
- Increase adolescents’ access to age-appropriate educational materials about the benefits of good nutrition
- Advocate for healthy choices to be included in school (and other public) vending machines
- Support media campaigns that promote physical activity for adolescents
- Increase the availability of safe, outdoor, youth-friendly facilities (such as parks, skating arenas, basketball courts, and bicycle paths)
- Require all schools to provide daily physical activity for K-12 students, including a wide variety of options
- Limit adolescents’ “screen time” to two hours per day or less
- Educate parents, guardians, and other caregivers on nutrition
- Train parents, guardians, school cafeteria workers, and other caregivers on how to prepare nutritious, kid-friendly meals
- Provide a list of adolescent-friendly weight-management resources and referrals to schools, health care providers, and other professionals who work with adolescents
- Promote training and resources to help health care providers talk to adolescents about their weight and motivate them to eat better and be more physically active

### Skills, Knowledge, & Attitudes
- Among adolescents, increased interest in and understanding of the nutritional content of their meals and snacks
- Increased motivation among adolescents to eat well
- Increased motivation among adolescents to be physically active
- Increased awareness among adolescents of opportunities for physical activities that they enjoy
- Increased understanding among parents/guardians, school staff, and other caregivers of how to provide adolescents with nutritious foods and drinks
- Increased motivation among parents/guardians, school staff, and other caregivers to provide adolescents with nutritious foods and drinks
- Increased comfort among health care providers and other professionals in talking to adolescents about their weight
- Improved ability among health care providers to communicate effectively with adolescents about nutrition and physical activity

### Behaviors
- Adolescents increase their intake of fruits, vegetables, and low-fat milk (or nondairy equivalent)
- Adolescents decrease their consumption of sugar-sweetened beverages, fried snacks, and other high energy dense foods
- Adolescents increase their physical activity
- Parents/guardians, school staff, and other caregivers provide more nutritious meals and snacks for adolescents, and reduce the availability of high energy dense foods
- Parents/guardians schedule more family meals

### Goal:
**Decrease the prevalence of overweight and obesity among adolescents**
- Increased interest and understanding of the nutritional content of their meals and snacks
- Increased motivation among adolescents to eat well
- Increased motivation among adolescents to be physically active
- Increased awareness among adolescents of opportunities for physical activities that they enjoy
- Increased comfort among health care providers and other professionals in talking to adolescents about their weight
SEXUALLY TRANSMITTED INFECTIONS: Decrease the Incidence of Sexually Transmitted Infections Among Adolescents

Remember Carmen?

Shortly after arriving at Carmen’s house on Friday night, Mark takes Carmen out for a romantic dinner. Carmen can’t help but think that tonight will be the night; and she really feels that she is ready to have sex with Mark. She has learned about the possibility of contracting sexually transmitted infections and getting pregnant, but she was too embarrassed to buy condoms. Besides, the last time they talked about sex, Mark promised her that he was healthy, so she didn’t have to worry. She trusts that Mark will bring condoms if they need them.

Current Picture

Sexuality is a natural, lifelong part of being human, and adolescents explore their sexuality as part of a process of achieving sexual maturity. Adolescents are capable of expressing their sexuality in healthy, responsible ways, but, in many instances, they lack the knowledge, skill, and motivation they need to do so. Adolescents need information about their bodies as well as age-appropriate and factual information about how they can take care of their sexual health. Adolescents who are armed with information about abstinence as well as ways they can explore their sexuality in safer and healthier ways are more likely to delay involvement in risky sexual behaviors and are more likely to protect themselves if they do have sexual intercourse.

“I think we need alternatives other than, ‘Listen—don’t do it’ or ‘Use a condom’.”

—16-YEAR-OLD FEMALE

The rate of teen pregnancy in Indiana has continued to decline and, as of 2006, was 50.9 per 1,000 females ages 15–19 (ISDH, 2008). While progress still needs to be made to lower the teen pregnancy and birth rates, little attention is paid to the number of adolescents who contract a sexually transmitted infection, which continues to increase every year. Given these trends, this plan limits its focus in the area of adolescent sexual health to reducing sexually transmitted infections.

It is true that many Hoosier adolescents have had sexual intercourse by the time they graduate from high school. Just under half (49.1%) of ninth- to twelfth-graders in Indiana have ever had sexual intercourse, and 37% report being currently sexually active (having sexual intercourse with one or more people in the past three months) (CDC, 2007a). Of those who are sexually active, a stunning 13.3% have had sexual intercourse with four or more people in their life (CDC, 2007a) (see Figure 10).
Failure to use a condom places those who are engaging in sexual activity at risk for contracting a sexually transmitted infection, including HIV. Only 57.1% of sexually active high school students reported using a condom during their last sexual intercourse, leaving them vulnerable to infection (CDC, 2007a).

Preventing sexually transmitted infections (STIs) is largely determined by behaviors. The only 100% percent effective way to guarantee that one will not contract an STI is by abstaining from any form of sexual activity. Should adolescents choose to be sexually active, correct and consistent use of condoms can significantly reduce the risk of STI transmission. This is true of both male and female condoms. In order to achieve the protective effect of condoms, adolescents must use them correctly and consistently. Inconsistent use (failure to use condoms with every act of intercourse) can lead to STI transmission, because transmission can occur with a single act of intercourse. Incorrect use can lead to condom slippage or breakage. The effectiveness of condoms is more often reduced by inconsistent and incorrect use than by inherent defects (Kirby, 2007).

Despite comprising one-quarter of the sexually active population, adolescents ages 15–24 account for nearly half of all new cases of STIs in the United States. As a result, about one-third of all sexually active young people in this country become infected with an STI by age 24 (Kirby, 2007).

Other ways to reduce the risk of contracting a sexually transmitted infection include reducing the frequency of sex, reducing the number of sexual partners one has, being tested and treated for STIs, and avoiding concurrent sexual partners (Kirby, 2007).
Sexually transmitted infections are disproportionately affecting the adolescent population and, without education, will continue to do so. Equipping adolescents with refusal skills, safer ways to express affection, and a sense of confidence and self-worth will help them delay intercourse and remain safer longer. Teaching adolescents the skills to insist on using condoms and to use condoms effectively will allow sexually active adolescents to reduce their risk of infection. Parents, communities, and schools should provide a clear, consistent message about reducing the risks of contracting a sexually transmitted infection.

How can we help adolescents like Carmen?

Changing the Picture
Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to, either in your family or in your community.

- Promote evidence-based, comprehensive sex education programs, including information about condom use.
- Educate parents/guardians on how to communicate with their adolescents about sexuality, including ways to prevent sexually transmitted infections.
- Increase awareness that comprehensive, confidential STI services (including the provision of condoms) are available to adolescents.
- Increase confidential access to affordable condoms.
- Provide programs, tools, and guidance to help adolescents develop a sense of dignity and self-worth and the communication, decision-making, assertiveness, and refusal skills necessary to reduce sexual health risks and choose safer sexual behaviors (such as insisting on condom use whenever engaging in an act that carries a risk of sexually transmitted infection).
- Promote regular STI screening for sexually active adolescents.
- Encourage conversations between doctors, adolescents, and their parents about vaccines available against certain STIs, such as HPV.

Equation for Success
Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing the incidence of sexually transmitted infections among adolescents. As you study the logic model, ask yourself where you fit into the equation.

“We received a very scare-tactics-esque sex education and health education, and that doesn’t work at all. We all think it is a joke; we don’t listen to what they say.”

—18-YEAR-OLD MALE
### Recommendations

- Provide comprehensive sexuality education to adolescents
- Train parents to discuss sexuality with their adolescents
- Provide peer-education and positive-youth-development programs that build adolescents’ communication, decision-making, assertiveness, and refusal skills around sexuality
- Distribute free or discounted condoms to adolescents
- Encourage conversations between doctors, adolescents, and their parents about vaccines available against certain STIs, such as HPV
- Educate adolescents, families, and health care providers about confidential and affordable STI screening and treatment

### Skills, Knowledge, & Attitudes

- Adolescents have increased knowledge about STI transmission, prevention, and treatment
- Adolescents have improved ability to talk with their partners about sexual health and safety
- Adolescents have increased ability and motivation to resist pressure to have sex or to have sex without a condom
- Adolescents have increased ability to make safe, healthy decisions about their sexuality
- Adolescents have increased willingness and ability to acquire and use condoms
- Adolescents and their families have increased awareness of available STI vaccines
- Increased awareness among adolescents of confidential and affordable sexual health services

### Behaviors

- More adolescents delay sexual intercourse and other sexually risky behaviors
- A higher rate of sexually active adolescents use condoms correctly every time they have sexual intercourse
- Sexually experienced adolescents have fewer sexual partners
- Increased condom use among sexually active adolescents
- Increased numbers of adolescents receive available vaccinations for STIs
- More adolescents receive screening for STIs
- More adolescents who have STIs receive the necessary treatment

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**Goal:**

Decrease the incidence of sexually transmitted infections among adolescents.
**S U I C I D E:** Decrease Suicidality Among Adolescents

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**Remember Michelle?**
Michelle’s mom’s insurance would only pay for six sessions with the psychologist, and those have been used. Michelle has begun to dread going to school in the morning, even pretending to be sick sometimes. In the afternoons, she is spending more and more time alone in her room with her door closed. Michelle’s mom is becoming even more concerned that her daughter is seriously depressed and may be having thoughts of hurting herself.

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**S U I C I D A L I T Y** includes suicidal ideation, attempts, and completed attempts.

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**Current Picture**
As adolescents grow and develop, they gain both competence and confidence. Competence encompasses the ability to operate successfully in a variety of areas, including academically, cognitively, physically, socially, and vocationally. Confidence indicates an internal sense of overall positive self-worth and self-efficacy. Yet this confidence and competence is very fragile and can often be wounded as a result of negative experiences. Life’s difficulties challenge adolescents at a time when they are still undergoing stages of development, often before they have the skills needed to cope with crisis. In such times of stress, some may conclude that ending their lives is the only viable alternative to make the pain go away.

Some adolescents who attempt suicide may be trying to escape feelings of rejection, hurt, or loss. Others might be angry, ashamed, or feeling guilty about something. Some may be worried about disappointing friends or family members, and some may feel unwanted, unloved, victimized, or that they are a burden to others. Most teens interviewed after making a suicide attempt say that they did it because they were trying to escape from a situation that seemed impossible to deal with, or to get relief from really bad thoughts or feelings—and at that particular moment, dying seemed the only way out for them (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).
Adolescents at greater risk for attempting suicide include those who suffer from depression, conduct disorders, or substance use and those who identify as being gay, lesbian, bisexual, or transgender (Krug et al., 2002).

Adolescent suicide is becoming more common. Statistics show that suicide is the third leading cause of death among adolescents in the United States (NAHIC, 2006). In Indiana, suicide has surpassed homicide to become the second leading cause of death among Hoosier teens (Indiana Youth Institute, 2007). Over one-quarter (27.5%) of Indiana high school students reported feeling so sad or hopeless almost every day for a period of two weeks or more over the past 12 months that they stopped doing some of their usual activities (CDC, 2007a). Nearly 16% (15.8%) of Indiana high school students seriously considered attempting suicide one or more times in the past year, and almost 12% (11.7%) made a plan about how they would attempt suicide (CDC, 2007a). Seven out of ten (7.2%) Indiana high school students attempted suicide one or more times in the past year (see Figure 11), and of those adolescents who attempted suicide, 2.9% required medical attention (CDC, 2007a).

Although females attempt suicide two to three times as often as males (Krug et al., 2002), males complete suicide nearly four times as often (CDC, 2005b). The most common methods used are suffocation, poisoning, and firearms. Overall, firearms remain the most commonly used suicide method among young people (American Association of Suicidology, 2008).

Suicide can result in a great sense of loss and burden of grief, not only to families and friends of victims, but also to society. Adolescent suicides can affect the economic sector of any particular society. Each year, the costs of lost workdays, emergency room visits, and in-patient care resulting from suicidality are extremely high. Adolescent suicides and attempted suicides can result in absenteeism, lost productivity, loss of quality of life, and a decrease in the work force, all of which, in fact, have detrimental effects on Hoosiers.

Taking an active interest in the lives of adolescents allows for a trusting relationship to form and can lead to the early detection of changes in adolescents’ attitude, thoughts, or behaviors. Making the effort to form a connection with adolescents in our lives can have a positive impact on an adolescents’ self-confidence and help to reduce suicidality.

Figure 11: Suicidality Among Hoosier High School Students
Source: CDC, 2007a.

![Figure 11: Suicidality Among Hoosier High School Students](image-url)
How can we help adolescents like Michelle?

Changing the Picture
Here are some recommendations on how to make a positive impact on this issue. After reviewing these recommendations, ask yourself which one(s) you are able to implement or contribute to, either in your family or in your community.

- Increase screening for depression and suicidality by professionals who work with adolescents.
- Initiate conversations with adolescents about stress, depression, or thoughts of suicide, and provide a safe environment for them to share such thoughts and feelings.
- Include information about suicide prevention in school curricula.
- Provide all adolescents with local resource information on suicidality.
- Train adolescents, families, and professionals who work with adolescents to recognize the warning signs of suicide.
- Educate parents, guardians, and other caregivers on the importance of firearm safety, including keeping firearms in a secure, locked location.

Equation for Success
Equipped with knowledge about the impact this issue has on the health and well-being of adolescents in Indiana, and having been given a set of recommendations, our challenge now lies in putting it all to use. The following logic model illustrates how acting upon the recommendations in this plan can lead toward the goal of decreasing suicidality among adolescents. As you study the logic model, ask yourself where you fit into the equation.

“Why don’t people take the initiative and give a compliment to somebody, like, once a day? Like, ‘You look nice,’ or that, can help people with emotional stress, you know.”
—15-YEAR-OLD MALE
### Recommendations

- Foster self-worth and connectedness through peer-education and youth-development programs for adolescents
- Encourage parents, guardians, and other caretakers to initiate conversations with adolescents about stress, depression, or thoughts of suicide, and to provide a safe environment for them to share such thoughts and feelings
- Distribute information about depression resources (such as crisis hotlines) to adolescents, parents, schools, health care facilities, and others
- Educate health care providers and others who work with adolescents about depression screening and treatment (see priority “Health Care Capacity”)
- Increase mental health services for adolescents (see priority “Mental Health Services”)
- Institute appropriate mental health evaluations of all adolescents who attempt suicide and their families
- Promote firearm-safety education among parents, guardians, and other caregivers

### Skills, Knowledge, & Attitudes

- Increased feelings among adolescents of connection to family, schools, and communities
- Decreased feelings among adolescents of worthlessness, hopelessness, and depression
- Increased recognition and awareness of adolescent depression
- Increased knowledge of where depressed or suicidal adolescents can get help
- Increased awareness among adolescents and their families of the risk of repeat suicide attempts
- Increased understanding among adolescents who have attempted suicide, and their families, of how to prevent future suicidality
- Increased motivation among parents, guardians, and other caregivers to reduce adolescents’ access to firearms

### Behaviors

- Fewer adolescents consider or attempt suicide
- Increased screening and treatment for depression and suicidality among adolescents
- Fewer adolescents who have attempted suicide repeat the attempt
- Decrease in use among adolescents of firearms for self-harm

### Goal:

**Decrease suicidality among adolescents**
**A CALL TO ACTION**

The Indiana Coalition to Improve Adolescent Health hopes that the stories of Michelle, Nathan, and Carmen highlighted throughout this strategic plan have raised your awareness and understanding of adolescent health priorities in Indiana. Our goal is that, through this knowledge, we will all be moved collectively to improve the lives of Hoosier adolescents.

Therefore, the call has been raised! We ask everyone—young people, families, parents, schools, health care providers, insurers, community organizations, faith-based organizations, businesses, government agencies, and Hoosiers everywhere—to find a part of this strategic plan you can act upon. Every step taken makes a difference, and steps taken in concert with others have even more impact.

Look through the plan to find ideas that you can put into action, be they in areas where you’re already active or maybe in a new area that inspires you. Take time to sit down with other individuals and organizations, to look at existing programs, and to explore different sectors of your community to see how you might weave your actions together for a greater outcome.

We would like to invite you to visit the Indiana Coalition to Improve Adolescent Health Web site (www.INadolescenthealth.org) and click on the Resources tab for a list of organizations and publications that can support you in implementing the recommendations in this plan.

Let’s work together to make this Picture of a Healthier Future a reality for Indiana. Our young people will definitely benefit, and so will we!
DATA MONITORING
The following organizations and publications may be helpful in monitoring the progress within each priority issue of this plan. You can find links to these tools and many others under the Resources tab of the Indiana Coalition to Improve Adolescent Health Web site (www.INadolescenthealth.org).

**General Adolescent Health Information**
- American Academy of Pediatrics
- American Medical Association
- Center for Adolescent Health and the Law
- Center for Young Women’s Health
- Centers for Disease Control and Prevention
- Maternal and Child Health Library
- National Adolescent Health Information Center
- The Society for Adolescent Medicine
- State Adolescent Health Resource Center, Konopka Institute for Best Practices in Adolescent Health, Department of Pediatrics, University of Minnesota

**Health Care Capacity**
- American Academy of Family Physicians
- American Academy of Pediatrics
- American Medical Association
- California Adolescent Health Collaborative
- The Society for Adolescent Medicine
- USC Adolescent Health Curriculum

**Health Insurance**
- Healthy Indiana Plan
- Hoosier Healthwise
- Indiana Family and Social Services Administration (FSSA)
- Medicaid and Private-Insurer Administrative Databases

**Mental Health Services**
- Community Mental Health Centers
- Indiana Family and Social Services Administration (FSSA), Department of Mental Health and Addiction
- Medicaid and Private Insurer-Administrative Databases

**Binge Drinking**
*Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents, Indiana Prevention Resource Center (IPRC), Indiana University*
- Behavioral Risk Factor Surveillance System (BRFSS), the Centers for Disease Control and Prevention
- Indiana Youth Risk Behavior Survey (YRBS), the Centers for Disease Control and Prevention
- National Survey on Drug Use and Health, Substance Abuse & Mental Health Services (SAMHSA)

**Cigarette Smoking**
*Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents, Indiana Prevention Resource Center (IPRC), Indiana University*
- Behavioral Risk Factor Surveillance System (BRFSS), the Centers for Disease Control and Prevention
- Department of Revenue, Cigarette Tax Data
- Indiana Tobacco Prevention and Cessation (ITPC) Policy Tracking [Smoke Free Policy for Schools and Communities]
- Indiana Tobacco Retailer Inspection Program (TRIP), the Alcohol and Tobacco Commission and the Indiana Prevention Resource Center
- Indiana Youth Tobacco Survey
Dating Violence
Behavioral Risk Factor Surveillance System (BRFSS), the Centers for Disease Control and Prevention
Note: Data on dating violence is scarce because it is dependent largely on voluntary reporting.

Motor Vehicle Fatalities
Fatality Analysis Reporting System (FARS), the National Highway Traffic Safety Administration (NHTSA)
Highway Safety and Consumer Groups, the Indiana Criminal Justice Institute Web site
Indiana Crash Facts, Indiana University Public Policy Institute, Center for Criminal Justice Research
Indiana Criminal Justice Institute, Traffic Safety Research and Data National Highway Traffic Safety Administration

Obesity
Behavioral Risk Factor Surveillance System (BRFSS), the Centers for Disease Control and Prevention
Centers for Disease Control and Prevention (CDC), Division of Nutrition, Physical Activity, and Obesity
Indiana Youth Risk Behavior Survey (YRBS), the Centers for Disease Control and Prevention

Sexually Transmitted Infections
Advocates for Youth
Centers for Disease Control and Prevention (CDC), Sexually Transmitted Diseases, Surveillance and Statistics
Indiana State Department of Health, STD Morbidity Reports
The National Campaign to Prevent Teen and Unplanned Pregnancy

Suicide
American Association of Suicidology
Behavioral Risk Factor Surveillance System (BRFSS), the Centers for Disease Control and Prevention
Centers for Disease Control and Prevention (CDC), WISQARS (Web-based Injury Statistics Query and Reporting System)
Indiana State Department of Health, Mortality Data
Indiana’s Violence and Injury Datasheet (2007)
Indiana Youth Risk Behavior Survey (YRBS), the Centers for Disease Control and Prevention
National Center for Health Statistics, Mortality Data
Suicide in Indiana: 2001–2005 Report on Suicide Completions and Attempts, Indiana State Department of Health

REFERENCES


APPENDIX: 21 CRITICAL HEALTH OBJECTIVES FOR ADOLESCENTS AND YOUNG ADULTS

The following 21 health objectives represent the most serious health and safety issues facing adolescents and young adults (aged 10 to 24 years): mortality, unintentional injury, violence, substance abuse and mental health, reproductive health, and the prevention of chronic diseases that will persist through adulthood.

Mortality:
- Reduce deaths of adolescents and young adults. (10- to 14-year-olds, 15- to 19-year-olds, 20- to 24-year-olds)

Unintentional Injury:
- Reduce deaths caused by motor vehicle crashes. (15- to 24-year-olds)
- Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes. (15- to 24-year-olds)
- Increase use of safety belts. [9th- through 12th-grade students]
- Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol. [9th- through 12th-grade students]

Violence:
- Reduce homicides. [10- to 14-year-olds, 15- to 19-year-olds]
- Reduce physical fighting among adolescents. [9th- through 12th-grade students]
- Reduce weapon carrying by adolescents on school property. [9th- through 12th-grade students]

Substance Abuse and Mental Health:
- Reduce the proportion of adolescents engaging in binge drinking of alcoholic beverages. (12- to 17-year-olds)
- Reduce past-month use of illicit substances (marijuana) by adolescents. (12- to 17-year-olds)
- Reduce the suicide rate among adolescents. (10- to 14-year-olds, 15- to 19-year-olds)
- Reduce the rate of adolescent suicide attempts that resulted in the need for medical attention. [9th- to 12th-grade students]
- Reduce the proportion of children and adolescents with disabilities who are reported to be sad, unhappy, or depressed. (4- to 17-year-olds)
- [Developmental] Increase the proportion of children with mental health problems who receive treatment.

Reproductive Health:
- Reduce pregnancies among adolescent females. (15- to 17-year-olds)
- [Developmental] Reduce the number of new cases of HIV/AIDS diagnosed among adolescents and adults. (13- to 24-year-olds)
- Reduce the proportion of adolescents and young adults with Chlamydia trachomatis infections among females attending family planning clinics, females attending sexually transmitted disease clinics, and males attending sexually transmitted disease clinics. (15- to 24-year-olds)
- Increase the proportion of adolescents [9th- to 12th-grade students] who:
  - Have never had sexual intercourse
  - If sexually experienced, are not currently sexually active
  - If currently sexually active, used a condom the last time they had sexual intercourse

Chronic Disease:
- Reduce tobacco use by adolescents. [9th- to 12th-grade students]
- Reduce the proportion of children and adolescents who are overweight or obese. (12- to 19-year-olds)
- Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness three or more days per week for 20 or more minutes per occasion. [9th- to 12th-grade students]

The mission of the Indiana Coalition to Improve Adolescent Health is to promote optimal health and well-being for all Hoosier adolescents (ages 10-24) with an emphasis on prevention and access to quality, comprehensive health care.

www.INadolescenthealth.org