

Substance Abuse

Planning Notes:

- 1) **Teams:** 4-6 students
- 2) **Length:** 3-5 class 45-minute periods
- 3) **Resources:** computers for background research; copies of reading on risk factors, and copies of student workbook (Optional: butcher paper, pencils, markers, computer paper)

OVERVIEW:

Youth today face many risks, but drugs abuse remains near the top of the list. Drug abuse has serious consequences in our homes, schools, and communities. Risk and protective factors for drug abuse are plentiful; sorting out the multitude factors that influence drug abuse is important in order to understand the problem and develop solutions.

The case study is focused on getting students to maximize their thinking in term of the breadth and depth of factors that influence a problem. It is also an opportunity for students to begin to question the relationships between variables

GOAL:

Organize a broad set risk and protective factors and outcomes in a visual tool that will help demonstrate the scope of the drug abuse and the many antecedents and connections between factors that influence the problem.

ROLE:

You! As a team of high school health science students, you have a tremendous opportunity to promote understanding and positive choices in your community!

OBJECTIVE:

Obj. 3.12: Identify connections between risk & protective factors and outcomes associated with a health problem (this includes the behaviors and antecedents leading to the health problem).

DELIVERABLES:

- 1) Factor-Outcome Web
- 2) Proposal for a SMART intervention

ASSESSMENT:

Your visual map will be evaluated on a rubric based on the organization, depth of thinking, and rigor of thinking. The intervention will be graded for effort, quality, and effectiveness.



Remind students that they should use the rubric to self-evaluate their work as well. This is a best practice that will help them manage their quality of work and have a clear sense of the expectations and grading criteria.

Case Introduction:

Risk & Protective Factors

Read Chapter 1: Risk and Protective Factors of the National Institute on Drug Abuse’s report entitled, “Preventing Drug Use among Children and Adolescents.” Answer the questions on the following page before, during and after reading.

The required reading can be shortened if necessary (for time or reading level especially). The most essential pages are pages 1-3.

Chapter 1: Risk Factors and Protective Factors

This chapter discusses how risk and protective factors influence drug abuse behavior. The early signs of risk, transitions to high-risk groups, and general patterns of drug abuse among children and adolescents. A major focus is how protective programs can strengthen protection or intervene to reduce risks.

What are risk factors and protective factors?

Factors over the past few decades have led to advances in the origins and pathways of drug abuse and addiction. How the problem starts and how to prevent it. More factors have been identified that help determine those most likely to abuse drugs from those less vulnerable to drug abuse. Factors include social and genetic factors, such as the “5-HTT” locus, which is associated with increased risk for drug abuse or called “resistance” locus. These genes, however, that most individuals at risk for drug abuse do not even carry those genes or have identical alleles, a risk factor for one person may not be for another.

As discussed in the introductory, risk and protective factors can affect children in a developmental risk trajectory. The risk factors for low risks become evident at different stages of a child's life. For example, early risks, such as low parental supervision, may be seen in a very young child. If not addressed through positive parenting

Later, this behavior can lead to additional risks when the child enters school. Aggressive behavior in school can lead to rejection by peers, punishment by teachers, and academic failure. Again, if not addressed through protective interventions, these factors can lead to even more vulnerable pathways for a child at risk for drug abuse, such as skipping school and associating with peers who share drugs by hooking on the risk path, research-based protective programs can help reduce or prevent a child's development to strengthen protective factors and reduce risks long before problematic behaviors develop.

The table below provides a framework for characterizing risk and protective factors in the family, or settings. These domains can then serve as a focus for prevention. As the first two examples illustrate, the presence of one means the absence of the other. For example, in the individual domain, early aggressive behavior, a risk factor, reduces the absence of positive parenting, a key protective factor. Helping a young child learn to control impulses behavior is a focus of some protective programs.

Risk Factor	Setting	Protective Factor
Child's Aggressive Behavior	Family	Positive Parenting
Lack of Parental Supervision	Family	Parental Monitoring
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Acquiring Life Skills
Poverty	Community	Strong Neighborhood Attachment

Preventing Drug Use among Children and Adolescents

Chapter 1 Principles

Risk Factors and Protective Factors

Protective programs should enhance protective factors and reduce or prevent risk factors.

The risk factors for drug abuse represent challenges to an individual's emotional, social, and academic development. These risk factors can produce different effects, depending on the individual's personality traits, onset of development, and environment. For instance, more severe risks, such as early aggressive behavior and peer academic achievement, may indicate that a young child is on a negative developmental path toward problem behaviors. Early intervention, however, can help reduce or reverse these risks and change that child's developmental path.

For young children already exhibiting serious risk factors, delaying protective interventions will likely make it more difficult to intervene later. By addressing children's attitudes and behaviors, we will establish and not easily changed.

Risk factors can influence drug abuse in several ways. They may be additive. The more risks a child is exposed to, the more likely the child will abuse drugs. Some risk factors can be particularly potent, or may not influence drug abuse unless certain conditions prevail. Having a family history of substance abuse, for example, puts a child at risk for drug abuse. However, an environment with drug-abusing peers and strong academic success, may shield the child from the risk factors. For example, strong protective factors such as parental support and involvement, can reduce the influence of strong risks, such as having a family history of drug abuse. **An important goal of prevention, then, is to change the balance between risk and protective factors so that protective factors outweigh risk factors.**

What are the early signs of risk that may predict later drug abuse?

Some signs of risk can be seen as early as infancy. Children's personality traits or temperaments can place them at increased risk for later drug abuse. Children's personality traits, for example, often include problem behaviors in interactions with their families, peers, and others that encounter in social settings. If these behaviors continue, they will likely lead to risk factors. These risks can include academic failure, early peer rejection, and later affiliation with delinquent peers, the most immediate risk for drug abuse in adolescence. Studies have shown that children with poor academic performance and inappropriate social behavior at ages 7 to 9 are more likely to be involved with substance abuse by age 14 to 15.

What are the early signs of risk that may predict later drug abuse?

These expressions, especially the abuse of drugs and other substances, are important in understanding the social setting. If these behaviors continue, they will likely lead to risk factors. These risks can include academic failure, early peer rejection, and later affiliation with delinquent peers, the most immediate risk for drug abuse in adolescence. Studies have shown that children with poor academic performance and inappropriate social behavior at ages 7 to 9 are more likely to be involved with substance abuse by age 14 to 15.

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Finally, critical or sensitive periods in development may require the presence of risk protective factors. For example, maternal attachment and bonding between parents and children usually occurs in infancy and early childhood. If it fails to occur during these developmental stages, it is unlikely that a strong positive attachment will develop later in the child's life.

When and how does drug abuse start and progress?

Studies such as the National Family on Drug Use and Health, formerly called the National Household Alcohol and Medical Health Survey Administration, indicate that most children who abuse drugs start drug use by age 12 or 13, which likely means that some use high-risk events early. These events include such factors as later adolescence, abuse typically because never touched with marijuana and first exposure to other illegal drugs, while continuing their abuse of tobacco and alcohol. Studies have also shown that early initiation of drug abuse is associated with greater drug involvement, whether with the same or different drugs. Note, however, that both cocaine and drug use never indicate that one youth did not progress to abusing other drugs. The strong theme of the progress, then drug abuse history can vary by neighborhood drug availability, drug availability, and other characteristics of the abuse prevention. In general, the pattern of abuse is associated with levels of social desirability, parental risk, and the availability of drugs in the community. Subsequent family problems often occur as why individuals, such as having a family history of drug abuse, did not abuse. While the genetically influenced a person to drug abuse. Another explanation is that growing older about a time may lead to affiliation with more drug-abusing peers which, in turn, exposes the individual to other drugs. Indeed, many factors may be involved.

Who and how does drug abuse start and progress?

Different patterns of drug initiation have been identified based on gender, race or ethnicity, and geographic factors. For example, research has found that the environments in which young people are affected drug can depend on where they grow up, their family, their peers, and their culture. Drug use patterns, in addition, may be influenced by abuse drug or alcohol use, such as peers, family, home, or partner. Additionally, drugs may be influenced by different people including, for example, siblings, friends, or even parents.

While more youth do not progress beyond initial use, a small percentage actually realize their substance abuse. Researchers have found that these youth are the most likely to have experienced a combination of high levels of risk factors with low levels of protective factors. These adolescents were characterized by high stress, low parental support, and low academic competence. However, there are protective factors that can reduce the transition to substance abuse. These factors include self-control, which tends to inhibit problem behaviors and other reasons naturally as children mature during adolescence. In addition, protective family structure, individual personality, and environmental variables can reduce the impact of severe risks of drug abuse. Prevention interventions can provide skills and support to high-risk youth to enhance levels of protective factors and prevent recidivism to drug abuse.

COMMUNITY ACTION BOX

- Parents can use information on risk and protective factors (e.g. talking with family child health providers).
- Parents can strengthen talking and bonding to school by addressing aggressive behavior and poor concentration—risks associated with later onset of drug abuse and related problems.
- Community leaders can discuss community risk and protective factors associated with drug problem to better target prevention services.

Preventing Drug Use among Children and Adolescents

Outside the Family

Other risk factors include the quality of children's relationships in settings outside the family, such as in schools, with their peers, teachers, or in the community. Difficulties in these settings can be crucial to a child's emotional, cognitive, and social development. Some of these risk factors are:

- aggression (disruptive behaviors, such as aggression and impulsivity);
- academic failures;
- peer social coping skills;
- association with peers with problem behaviors, including drug abuse, and
- acceptance of the extent and acceptability of drug-abusing behaviors in school, peer, and community environments.

Association with drug-abusing peers is often the most immediate risk for exposing adolescents to drug abuse and delinquent behavior. Research has shown, however, that addressing such behaviors in intervention can be challenging. For example, a recent study (Duncan et al., 2005) found that high-risk youth in a peer group intervention tended to engage in substance use. Current research is studying the role that adults and positive peers can play in helping to avoid such outcomes or lessen intervention.

Other factors—such as drug availability, drug trafficking patterns, and health that drug abuse is generally inescapable—can also play roles in influencing young people to use or abuse drugs.

Family has an important role in providing protection for children when they are unable to provide protection for themselves. When children are outside the family setting, the most salient protective factors are:

- age appropriate parental monitoring of children's behavior, including monitoring curfew, evening alone, and the presence of activities outside the home, knowing the child's friends, and enforcing household rules;
- success in academics and involvement in extracurricular activities;
- strong bonds with physical institutions, such as school and religious institutions, and
- acceptance of conventional norms against drug abuse.

What are the highest risk periods for drug abuse among youth?

Research has shown that the key risk periods for drug abuse occur during the transition to adolescence. These transitions include aggressive behavior during adolescence, such as aggression during a parent's divorce or social activities such as partying or drinking when children experience heightened vulnerability for problem behaviors.

The first key transition for children is when they leave the security of the family and enter school. Later, when they advance from elementary school to middle or junior high school, they often experience new academic and social situations, such as learning to get along with a wider group of peers and having greater expectations for academic performance. It is at this stage—mid-adolescence—that children are likely to encounter drug abuse for the first time.

Then, when they enter high school, young people face additional psychological and emotional challenges. At this time, they may be exposed to a greater availability of drug, drug dealers, and social environments involving drugs. These challenges can include that they will not always be able to avoid these risks.

A particularly challenging situation is when adolescents move away from home for the first time without parental supervision, perhaps to attend college or other activities. Substance abuse, particularly of alcohol, remains a major public health problem for college populations.

When young adults enter the workforce or marry, their adult roles can reduce and prevent risks that may place them at risk for alcohol and other drug abuse in their adult environment. But their challenges can also be protective when they present opportunities for young people to grow and prevent future risk and distress. Research has shown that those who identify with an aggressive future, but that challenges can also be protective when they present opportunities for young people to grow and prevent future risk and distress. Research has shown that those who identify with an aggressive future, but that challenges can also be protective when they present opportunities for young people to grow and prevent future risk and distress.

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Preventing Drug Use among Children and Adolescents

IMPORTANT LINE IN REPORT (emphasize with students): “Please note, however, that most individuals at risk for drug abuse do not start using drugs or become addicted. Also, a risk factor for one person may not be for another.”

Source: Robertson, EB, David, SL, and Rao, SA. Preventing Drug Use among Children and Adolescents (In Brief), Second Edition. National Institute on Drug Abuse on Drug Abuse. <http://www.drugabuse.gov/sites/default/files/preventingdruguse_2.pdf>

Explore the Problem:

1. Before Reading:

Consider your own life. Think about home, school, the community, organizations or activities you are part of, your family, friends, the media, and anything else that has an influence on you or occupies your time. What factors, in your experience, have influenced your choice to use or not use drugs. List as many as you can!

This will be the beginning of their list that will be translated into a visual diagram (factor-outcome web).

2. During Reading:

Examine the five domains (or settings) on page 6 (first page of Ch. 1). Which domain (individual, family, peer, school, or community) do you think plays the **biggest role** in your decision to use or not use drugs? Which plays the **smallest role**? Explain.

3. After Reading:

What was most surprising or interesting to you about this issue? List at least one new and useful thing you learned from this reading.

Background Research:

1. Choose the specific drug you will focus on and circle your choice below:

- a. Anabolic steroids
- b. Bath salts
- c. Cocaine
- d. Heroin
- e. Inhalants
- f. Marijuana
- g. MDMA (Ecstasy)
- h. Methamphetamine (Meth)
- i. Prescription Drugs
- j. Tobacco
- k. Alcohol

Student teams can be assigned to the drugs or choose their own, at instructor discretion.

2. Conduct background research. Begin at the following website:

<http://teens.drugabuse.gov/drug-facts>

Note: For teams choosing ALCOHOL, the website above does not have information. Instead, begin at: www.cdc.gov/healthyyouth/alcoholdrug/

3. Find additional credible sources (ex: CDC, NIH, WebMD, etc.) to gather additional background information.

If time permits, instructor may assign a minimum number of additional background research sources.

4. Record important information and your source citation information in the table on the following page:

	Information
<p>Description of drug (include routes of administration)</p>	
<p>How many teens abuse it? (include any other important data or statistics you find)</p>	
<p>What are the short and long-term effects?</p>	
<p>How does it affect the brain?</p>	
<p>SOURCES: (Record your source in this box. Number them so you can footnote the information you list above.)</p>	

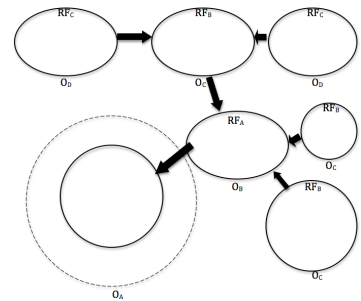
Identifying Risk & Protective Factors:

Using the reading, the web sources from your background research, and any other sources, list as risk and protective factors for abuse of your assigned drug in the table below.

Risk Factors	Protective Factors
<div data-bbox="570 705 1297 909" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>These factors will all end up on the factor-outcome web. If students want to jump straight into creating the web, that could be allowed. Some students will think better with a visual, so the webbing process will trigger ideas of new factors to include.</p> </div>	
<p>SOURCES:</p>	

Factor-Outcome Web:

Using your lists in the table above, create a Factor-Outcome web that encompasses all of the variables you have. As you create your web, you will likely add more variables as you go, because the connections you begin to see will give you new ideas. This is the benefit of creating a visual map of our thinking!



Students might want to do a very brief pencil sketch of a part of their web in the empty space here. Then they might want to collaborate with team members and create a larger web on butcher paper.

Identify Solutions:

Review your Factor-Outcome web. Choose one factor-outcome pair (two connected variables) and write them below:

Risk or Protective Factor:

Outcome:

Now you will propose a simple, yet SMART intervention aimed at reducing the negative risk factor you selected in order to improve the outcome OR promoting the positive protective factor to improve the outcome. Use the space below to brainstorm your intervention, then fill out the Intervention Proposal on the next page.

BRAINSTORM SPACE:

Provide students with examples of interventions and ask them to give brief feedback based on the criteria for grading the evaluations listed in the rubric. Providing a variety of intervention examples will help them think broadly without limiting their creativity.

Intervention Proposal:

Drug:

Name of Intervention:

Factor/Outcome:

Description:

How is this intervention SMART?

Specific:

Measurable:

Achievable (yet Ambitious!):

Relevant:

Time-bound:

How would your intervention be evaluated in order to determine how it worked and whether it was successful or not?

Rubric:

Your final Factor-Effect web and your Intervention Proposal will be graded using the rubric below.

Obj. 3.12: Identify connections between risk & protective factors and outcomes associated with a health problem (this includes the behaviors and antecedents leading to the health problem).

	Needs Improvement	Emerging Mastery	Partial Mastery	Mastery
Factor-Effect Web	<p>Organization: Web is very confusing</p> <p>Depth: Includes less than 10 variables</p> <p>Rigor: Variables are too simplified or unclear</p>	<p>Organization: Web is confusing or inaccessible</p> <p>Depth: Includes at least 10 variables</p> <p>Rigor: Variables are somewhat unclear</p>	<p>Organization: Web is visually accessible</p> <p>Depth: Includes at least 15 variables</p> <p>Rigor: Variables are mostly clear and detailed</p>	<p>Organization: Web is visually pleasing</p> <p>Depth: Includes at least 20 variables</p> <p>Rigor: Variables are clear and detailed</p>
Intervention Proposal	<p>Effort: Idea is incomplete</p> <p>Quality: Description incomplete or confusing.</p> <p>Effectiveness: Missing or incomplete SMART criteria and evaluation plan</p>	<p>Effort: Idea lacks originality</p> <p>Quality: Description somewhat unclear</p> <p>Effectiveness: Clear but is not convincing or does not meet SMART criteria or have a logical evaluation plan</p>	<p>Effort: Somewhat Creative but may lack originality</p> <p>Quality: Description provides fairly clear explanation</p> <p>Effectiveness: Clear but is only somewhat convincing or does not meet SMART criteria or have a logical evaluation plan</p>	<p>Effort: Creative and original intervention</p> <p>Quality: Description provides clear explanation</p> <p>Effectiveness: Clear and convincing; meets SMART criteria, has appropriate evaluation plan</p>