

# Dispelling Myths about HIV Transmission: An Exploration of Risk Appraisal and Self-Responsibility

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## Abstract

*The rate of HIV infection among teenagers is rising rapidly in the United States. This is due in part to their tendency to believe that they are invulnerable (Atwood and Donnelly, 1993). Many current educational strategies do not educate students in a fashion that exhibits the true risk of infection or the behaviors that increase such risk. Fifteen years after the discovery of the HIVirus teens are still largely unaware that they are at risk of contracting a fatal disease.*

*The instructional strategy described here expresses risk as a continuum and reinforces various behaviors that are classified as: "No Risk", "Moderate Risk", and "High Risk". The primary emphasis of this technique is to educate students about risk management. This strategy promotes a high degree of student participation.*

*Preliminary experiences with this instructional strategy indicate that students are influenced by and retain the concepts developed via the three step process described within this paper. While many consider education key to disease prevention, it is only effective if students remember and apply the material learned.*

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## Introduction

The purpose of this instructional strategy is to enable students to differentiate between three levels of health behavior (high risk, low risk, and no risk or nominal risk). These differences are expressed within a game entitled "What If". As a result of participation in these activities students are encouraged to clearly identify personal behaviors potentially related the HIV and how these behaviors may increase or decrease the risk of HIV transmission. Moreover, this activity enables students to debunk myth and reduce unfounded fears regarding the transmission of this disease.

## Target Audience

This instructional strategy has the potential for application within several grade levels. In the elementary school it could demonstrated by the teacher, but the activity is primarily designed to suit students who already possess more than a rudimentary level of understanding concerning the relationship between behavior and consequences. Most specifically, middle school and above would benefit from this strategy.

## Time

This instructional strategy can be conducted within one hour. However, the expectations are that this material will serve as a foundation for future lessons in sexuality and/or disease control.

## Materials

Three brightly colored boxes measuring approximately one foot square are suggested. Recommended colors are: red, yellow and blue. These boxes are utilized in differentiating between degrees of risk.

## Objectives

- Students will recognize how HIV is transmitted.
- Students will differentiate between myth and reality concerning this disease.
- Students will assess safe and unsafe behaviors as they relate to the transmission of HIV
- Students will describe the risk of HIV infection as it relates to the continuum demonstrated in the lesson.

## Goals

To provide students with accurate information about HIV infection that will ultimately reduce the risk of HIV transmission.

## Activity

### Part One

This activity begins with the instructor asking students to take out a clean piece of paper and pen or pencil. Ask the students to complete the sentence stem "what if...." by writing a brief scenario in which they describe how HIV transmission may occur. Explain that they will hand in these sentences without their names on them. Anonymity is important to prevent students from censoring themselves. Some of the sentences that students complete will be realistic

while others may be very exaggerated. All sentences are relevant, however since this provides the opportunity for students to learn how the virus is contracted and transmitted.

Before asking the students to complete the "what if" sentence stems it is important for the instructor to share a "what if" with the class. A what if the authors have tested in class follows:

What if Magic Johnson challenged you to a game of one-on-one basketball and as the two of you are playing Magic Johnson (who is HIV positive) jumps into the air, spins around and jams the basketball. However while dunking the ball he cuts his finger on the rim and as you stand in awe of his physical skill (with your mouth open) a drop of blood lands on your tongue. What is the degree of risk for you to contract HIV under these circumstances?

Before students respond to this question ask them to create their own "What if". The aforementioned example provides students with an idea of what the instructor is requesting. Typically, students find the above example humorous. However, it is important to encourage them to be both creative and realistic formulating their sentences. Although the authors have yet to observe it as a problem, teachers employing this strategy should be aware of the potential for "what if" statements that may be accidentally or intentionally distasteful. A quick screening of the statements prior to reading them to the class will give the teacher the opportunity to modify or eliminate any statements that are potentially inappropriate.

**Part Two**

Once students have completed their responses to "What if" collect their papers. Before reading these examples explain to the students that there are three factors which need to be present in order to contract the HIVirus. These factors are: 1) presence of the virus, 2) suitable pathway for the virus, and 3) timing. Without the presence of all three of these factors it becomes all but impossible to contract the HIVirus. Thus, when assessing risk one must carefully determine the absence or presence of these three factors.

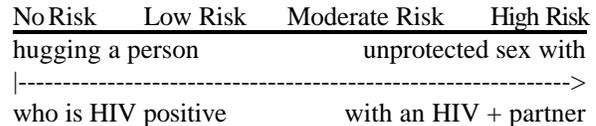
In the example provided concerning Magic Johnson, one of these factors is present ( number 1 the presence of the virus), while the remaining two (suitable pathway and timing) are suspect. The

pathway is present, but the viability of the virus must be accurately assessed. One drop of blood entering an unopened entryway reduces the viability of the virus. Thus the third factor (timing) is not a consideration if a pathway is not present. (This will open the door for discussion as to potential for risk if there is a wound in the mouth ) These factors are intentionally listed in the order of pathogen, pathway and timing. The logic is that if the virus is not present, then there is no reason to assess the pathway and timing. Utilization of these three factors enables students to assess personal risk within a variety of circumstances.

**Part Three**

Once students are familiar with the three factors an new element is added to the strategy. This new element is the degree of risk. At this time the instructor tapes the three colored boxes to the chalkboard. The red box symbolizes high risk, the yellow box symbolizes low risk and the blue box symbolizes no risk or nominal risk.

Following a brief review of the three risk factors the instructor may begin reading the student responses. After the instructor reads one of the randomly selected "What if" responses the class is asked whether the behavior should be placed in the red box, the yellow box or the blue box. This enables the students to determine which of the three factors is present and what degree of risk, if any, is present. This provides an opportunity for students to apply the knowledge that they have just acquired. Students are frequently saturated with HIV information but seldom do they have the opportunity to accurately assess and utilize this information. Allowing students to assign a degree of risk to each scenario is the most important element of this instructional strategy. The ability to accurately assess the risk of behaviors and to make informed decisions based upon this degree of risk is a vital skill for the health educated person. Without the opportunity to practice application of knowledge students would be more likely to lose sight of this element of the exercise. Another important issue resulting from this activity is to demonstrate the continuum of health-risk behaviors. All behaviors present themselves at a location on this continuum. For example:



This continuum is important! Although it is possible to express risk behaviors in the three categories, explaining risk in terms of a continuum emphasizes that if a student engages in a particular behavior located anywhere beyond NO RISK on the continuum s/he IS AT RISK.

Moreover, there are several methods of introducing this material into the classroom. If students are younger, a theme may be used to enhance long-term understanding. For example, Goldilocks and the Three Bears may be utilized to identify the three factors. In this example Mama Bear (pathogen), Papa Bear (pathway), and Baby Bear (timing). Younger students are easily able to envision these characters more easily than colored boxes. Younger students enjoy animating these characters along with what they represent. In such an example Mama Bear and Papa Bear may be present but the timing must be JUST RIGHT. There are multiple ways to adapt different themes to this strategy in order to make it appropriate to age and readiness of the class.

One additional example for older students utilizes a sports theme. In this approach "three strikes and you're out is employed to emphasize the three issues of pathogen, pathway and timing. The authors have observed that, when given the opportunity, students will be very imaginative and develop many additional themes that suit their interests and awareness.

### Summary

Often individuals base their decision making on what they have heard. Unfortunately, what one hears is not necessarily the truth. Under these circumstances, not only is the individual uninformed but misinformed. Most Educators would agree that the only thing worse than being uninformed is being misinformed. The strategy described here helps students develop the skill to assess risk, understand consequences and make more informed decisions. It is designed to equip the student not only with information, but the ability to recall high-risk behavior through both the three box concept and the continuum of risk. The goal of this strategy is to prepare students to pause and assess risks before acting. A brief pause to consider behavior may enable individuals to select a behavior based on accurate information as opposed to a state of uncertainty.

Although the assumption is that most students are unaware of how HIV is transmitted, research indicates that this is often not true (Donnelly et al 1996).

Consequently this instructional strategy provides additional knowledge, combined with a memorable method of pragmatic application of information. The instructional strategy promotes decision making and is sufficiently action oriented to eliminate the sense of saturation and moralizing found in many HIV/AIDS educational strategies. This is of great importance because if students are not able to recall information as well as employ it in decision making there is less likelihood that the knowledge will be applied in real-life situations. With the known dangers of HIV it is vitally important that students retain accurate information and incorporate it into their decision making.

### References

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