# Assessment Available for The Michigan Model for Health™

#### Growing Up and Staying Healthy: Understanding HIV and Other STIs A Module for Grades 7-8

There are two forms of assessment in the *Michigan Model for Health*™ lessons. One form, curriculum-embedded assessment, is present at the end of the lessons in the form of rubrics and checklists for scoring student work. These assessments were developed specifically for the instructional activities in the lessons and are excellent classroom-level tools for assessing student performance on the knowledge and skills taught in *Growing Up and Staying Healthy: Understanding HIV and Other STIs.* Embedded assessments are listed in the Time and Materials Chart and noted in the Preparation section at the beginning of each lesson.

Also included behind this tab is the other form of assessment, a collection of pre-/post-tests for this module. These instruments are designed to help educators assess the change in knowledge, skills, and attitudes as a result of teaching this curriculum. Electronic copy masters of the tests are included on the Teacher Resources flash drive packaged with this manual.





# Michigan Model for Health<sup>™</sup> Pre-/Post-Test

#### INSTRUCTION GUIDE

The *Michigan Model for Health™* (*Michigan Model*) Pre-Post Test is an evaluation instrument for the Grades 7-8 *Michigan Model* Curriculum. This Instruction Guide provides information on the *Michigan Model* Pre-/Post-Test and how to use it in your evaluation.

There are three parts to this Instruction Guide:

- O Part 1 provides an overview of the *Michigan Model* Pre-/Post-Test and describes the different sections of the instrument,
- O Part 2 provides instructions on how to administer the *Michigan Model* Pre-/Post-Test to students, and
- Part 3 discusses how to score, analyze, and interpret the *Michigan Model* Pre-/Post-Test results.

#### Part 1: Overview of Pre-/Post-Test

### **Purpose of the Pre-/Post-Test**

The Michigan Model for Health™ (Michigan Model) is a comprehensive health education curriculum that facilitates skills-based learning through lessons that include a variety of teaching and learning techniques to build positive lifestyle behaviors in students and families. In addition, the Michigan Model targets all of the most serious health challenges faced by students at elementary and secondary grades, including social and emotional health; nutrition and physical activity; alcohol, tobacco and other drugs; safety; personal health and wellness (elementary); and HIV (upper elementary and secondary).

Because the *Michigan Model* is comprehensive in nature, there are many potential variables that could be included in an evaluation of the program. In addition, those interested in the impact of the *Michigan Model* program are likely to have a variety of reasons for conducting an evaluation. Some may be primarily interested in examining changes in attitudes among students while others may be interested in examining changes in skills taught in the program.

The *Michigan Model* Pre-/Post-Test has several important features:

- O Each unit has a separate test: (a) Nutrition & Physical Activity; (b) Tobacco & Vaping; (c) Social and Emotional Health & Safety; (d) Alcohol & Other Drugs; (e) HIV & Other STIS.
- O Each test measures a variety of variables, including concepts, skills, attitudes, and/or behaviors.

O Each test is reliable and valid. The test items showed adequate test-retest reliability over a three-week period and were judged by a panel of health education experts to measure the intended constructs.

### Part 2: Administering the Pre-/Post-Test

#### Pre-/Post-Test Schedule

The Pre-Test assessment should take place before starting the Michigan Model curriculum. Administering the Pre-Test within a week before starting *Michigan Model* is best.

The Post-Test assessment should be conducted after the program has been completed. Administering the Post-Test within a week after completing Michigan Model is best.

Follow-up Post-Test assessments are desirable to determine whether any changes emerged or were sustained over a long-term period. Any Follow-up Post-Tests should occur after enough time has passed (at least one month is best) to allow students to practice the skills they've learned.

#### **Pre-/Post-Test Options**

If more than one unit of the Michigan Model will be taught (e.g., Social and Emotional Healthy & Safety, and Nutrition & Physical Activity), there are at least two options for conducting the Pre-Post-Tests: (a) conduct all of the tests corresponding to those units at one time for the Pre-Test, prior to teaching any units, and conduct tests of all the units at the Post-Test, after all units are taught; or (b) conduct the Pre-/Post-Test for each unit separately, just before and after each unit is taught.

If the entire Michigan Model Grades 7-8 curriculum will be taught and you plan to pre-test all of the units before beginning to teach, two testing sessions (e.g., Pre-Test) are recommended in order to maximize student concentration and minimize fatigue. For example, the first testing session could include Social and Emotional Health & Safety and Tobacco & Vaping. The second testing session could cover Alcoho, & Other Drugs; and Nutrition & Physical Activity.

#### **Pre-/Post-Test Data Collection**

Data collection should be done consistently to ensure reliable results. Here are some suggested guidelines:

- 1. Prior to the survey, make sure each student:
  - has a copy of the survey,
  - O has a pen or pencil, and
  - is seated far enough away from the others to ensure his or her answers can remain private.
- 2. To begin the survey, read the following script to the students:

(Pre-Test assessment only) "We would like you to answer some questions. We want to know how students your age, think, and feel. We hope that you will have fun and find it interesting to answer these questions.



(Post-Test assessment only) "We know that most of you have completed this survey before. However, we are interested in what your answers are to the questions NOW.

"Give the best answer you can. Work quickly but carefully. The questions will give you different options for answering. Remember, choose the answer that best fits you. Make sure that you give only one answer for each question.

"Your information will be kept private. Do not say your answers out loud. If you don't want to answer a question, leave it blank. If you do not understand a question, raise your hand and I will help you."

## Part 3: Scoring and Analyzing the Results

#### **Scoring the Results**

For most purposes, the best scoring method is to tally the number correct for each student. Use the answer key which is immediately following the Pre-/Post Test to score each item. Each correct item is worth one point.

If percentages are needed to determine whether a performance goal was met (e.g., at least 80% correct), calculate the percent correct by adding up the number correct and dividing by the total number of items for that test.

#### **EXAMPLE: Calculate Percent Correct**

Nutrition and Physical Activity Pre-/Post-Test (22 items):

|           | Pre-Test |                    | Post-Test |                    |
|-----------|----------|--------------------|-----------|--------------------|
|           | #        | %                  | #         | %                  |
| Student # | correct  | correct            | correct   | correct            |
| 01        | 5        | 5/22 = <b>23%</b>  | 15        | 15/22 = <b>68%</b> |
| 02        | 8        | 8/22 = <b>36%</b>  | 18        | 18/22 = <b>82%</b> |
| 03        | 14       | 14/22 = <b>64%</b> | 20        | 20/22 = <b>91%</b> |

#### **Analyzing the Results**

Analyzing data can involve tests for "statistical" significance and "social" significance. Tests of statistical significance reflect whether the observed results are reliable and not due to chance. Statistical testing involves technical skills that may require assistance from a program evaluator or other expert.

Tests for social significance, or "real-world" impact, are usually based upon whether the observed results meet a pre-determined performance level (e.g., at least 80% correct).

The following are questions that help analyze the social significance of the results.

• Were the outcomes in the expected direction? The direction of change is a basic yet important indicator, especially when the outcomes did not meet or exceed the performance goal(s), because at least you'll know whether you are moving in the right direction. If the outcomes are in the opposite direction or not as robust as expected, a careful review of the program and process evaluation should occur.

- O Did the outcomes meet or exceed the expected performance level(s)? This is the "bottom-line" question of your analysis, because it relates directly to the expected outcome.
- O Were the outcomes different for various groups (e.g., males vs. females)? Not all subgroups may have similar outcomes, so it may be important to report any differences. In addition, any subgroup differences should be considered and monitored as part of the program improvements in subsequent years.
- O Were there unintended positive or negative outcomes? Not all outcomes can be anticipated, so it's important to identify and report any unintended results. Typically, unintended or negative outcomes emerge and can be understood better when a variety of stakeholders, such as those comprising a school health advisory council, are involved in the interpretation of the results. For example, high prevalence of attitudes favoring drug use among a few students may reveal an isolated problem noticed by teacher or parents.
- O How clearly were the outcomes attributable to the program? There are various levels of confidence in attributing student outcomes to programming. Generally speaking, more confidence in the link between programs and outcomes results from implementing evidence-based programs such as the Michigan Model for Health<sup>TM</sup>, because such programs have track records of effectiveness when implemented with fidelity. An additional approach to determining a positive program effect is the use of a *comparison group* or *control group*. These groups have not received the program but are otherwise similar to the program group (e.g., in age, gender composition, and risk status). If the program group changed in the expected direction, but the comparison/control group did not, there is strong evidence of successful, program-related outcomes.

#### What If the Pre-/Post-Test Results Are Negative?

Usually, the concern about negative results lies in whether an intended performance goal was achieved. Although negative results can be demoralizing, they shouldn't be minimized or ignored, but rather seen as an opportunity for stakeholders, such as those comprising a school health advisory council, to reflect upon the program and related factors that may have accounted for the unwanted results.

It is also important to realize that negative results can emerge even after years of successful programming and outcomes, which might be attributable to changes in the student population and/or shifts in community attitudes (e.g., toward drug use).

Negative results could be due to one or more of the following reasons, all of which should be considered in efforts to improve program outcome in future years:

- The Pre-/Post-Test was not administered properly. Negative results could be due to a variety of poor testing conditions, including incomplete test directions, hurrying the respondents, or even the attitude of the test administrator. Make sure that the administration procedures (provided in Part 2) are followed and that the same procedures are used for each testing session.
- O The program was not implemented completely or competently (with "fidelity"). Negative results commonly originate from poor or incomplete planning and execution of the program. The Pre-/Post-Test for each unit (e.g., Safety) is designed under the assumption that all lessons for that unit have been implemented with fidelity by a person trained to teach the *Michigan Model for Health*<sup>TM</sup>.

Essentially, a control group and comparision group serve the same purpose, but a control group is selected through random assignment, whereas a comparison group is chosen through non-random methods. The clearest link between student outcomes and programming is made by using a control group. However, random assignment is a sophisticated process and is not always practical. Check with a professional evaluator for advice and assistance.



- O There were unexpected roadblocks. Even if the Michigan Model is implemented with fidelity by trained teachers, there may be unforeseen roadblocks to successful outcomes. For example, the program may have been received poorly by the students, or students did not participate as planned. It's also possible that an event in the district, such as a recent lapse in enforcement of rules against violence, may have weakened the prevention message. Because unanticipated roadblocks are possible, it's critical to detect them early and take steps to overcome them.
- O The performance goal was not realistic. If negative results were found despite implementing the program with fidelity by a trained teacher without incurring significant roadblocks, consider whether the original goals were on track. Was the timeline for change too short? Was the targeted behavior too resistant to change? Were the students more at-risk than originally believed? Finding answers to these questions usually involves a thorough needs assessment that includes not only a general review of objective risk factors and protective factors in the student population, but also reactions from trusted program participants and other students to determine their unmet needs and concerns.



# Michigan Model for Health<sup>™</sup> Pre-/Post-Test

#### **HIV/STI Prevention**

#### These questions are about HIV/STI prevention. Choose the best answer.

| 1. | Human Immunodeficiency Virus (HIV) causes HIV infection.  Yes  Maybe  Maybe not  No   | 6.  | Which of the following is an STI?  Herpes Gonorrhea Chlamydia Human Papillomavirus (HPV) All of the above   |
|----|---|-----|---|
| 2. | Most people got infected with HIV through sharing needles.  Yes  Maybe  Maybe not  No   | 7.  | Which of the following puts somebody at risk for HIV and Sexually Transmitted Infections (STIs)?  Sexual intercourse  Sharing needles for drugs, body piercing, or tattooing  Contact with blood, sores, or rashes  All of the above.                                 |
| 3. | The second major cause of HIV infection is sexual intercourse.  Yes  Maybe  Maybe not  No                                       | 8.  | Which of the following increases the risk for STIs?  Vaginal intercourse with a person with a STI  Oral sex with a person with a STI  Anal sex with a person with a STI  All of the above.  |
| 4. | A person with HIV can live a long time.  Yes  Maybe  Maybe not  No  | 9.  | Which of the following has no known cure?  Herpes Gonorrhea Chlamydia Syphilis  |
| 5. | People infected with HIV are able to transmit HIV to others even if they feel well and look healthy.  Yes  Maybe  Maybe not  No | 10. | Which of the following is a way drug use results in HIV infection?  Sharing needles to use drugs.  Taking too many pills.  Sharing my asthma inhaler with someone else who is having trouble breathing.  Taking pills you got from a friend when you have a headache. |

| <ul> <li>11. Which of the following actions would put a person at the MOST risk of getting HIV?</li> <li>Hugging</li> <li>Sneezing</li> <li>Eating lunch together</li> <li>Injecting illegal drugs with a needle</li> </ul>  | <ul> <li>16. José is a student playground aide. One day a girl fell and cut her knee. How could José help the bleeding student?</li> <li>Put his hand over the cut to stop the bleeding.</li> <li>Ask another student to get an adult to help.</li> <li>Ask another student to put his or her hand</li> </ul>  |
|--|--|
| <ul> <li>12. Emma wants to learn more about HIV and STIs. Which resource would be able to help Emma?</li> <li>A health website sponsored by the government or a university.</li> <li>A health professional such as a physician or nurse.</li> <li>Local counseling agencies or organizations that give information about HIV and STIs.</li> <li>All of the above.</li> </ul> | over the cut.  Ignore the student because it wasn't that bad a cut.  17. Jessi's boyfriend wants to take her to a party where there will be kids using alcohol and other drugs, but her boyfriend wants her to go anyway. What is the BEST way for Jessi to tell her boyfriend that she does not want to go?  In a firm voice (without yelling), say, "I am your girlfriend, but I don't want to go to the |
| <ul> <li>13. Which of the following is the BEST Internet source to learn more about the dangers of HIV and STIs?</li> <li>A website ending in .gov or .edu.</li> <li>A website ending in .com.</li> <li>A website ending in .tv.</li> <li>None of the above, don't use the Internet.</li> </ul>  | party."  Say, "Maybe I could go for a short time, as long as I don't have to talk with anybody."  Go with her boyfriend, but leave her mom a message about where she is.  In a soft voice, say, "I really shouldn't go to the party."  |
| <ul> <li>14. Which of the following is a potentially risky situation for engaging in sexual activity?</li> <li>Going out with someone you don't know very well.</li> <li>Going to parties where alcohol and other drugs are being used.</li> <li>Going to houses where no parents or other adults are supervising.</li> <li>All of the above.</li> </ul>                     | <ul> <li>18. Which of the following is a good way to communicate nonverbally (without using words)?  <ul> <li>Stand or sit straight and tall.</li> <li>Use eye contact when speaking.</li> <li>Stand face-to-face.</li> <li>All of the above.</li> </ul> </li> <li>19. To improve communication when a friend is talking, you should do the following:</li> </ul>  |
| <ul><li>15. Most U.S. students in grade 7, 8 and 9 have not had sexual intercourse.</li><li>True.</li><li>False.</li></ul>   | <ul> <li>While your friend is talking, be thinking about what you'll say next.</li> <li>Ask questions to understand what he or she is saying.</li> <li>Continue to do something else, but quietly.</li> <li>Look behind your friend to see if anything else is happening.</li> </ul>   |

| <ul> <li>20. Which of the following is an effective way to refuse to do something?</li> <li>Say a direct "no."</li> <li>Suggest another activity.</li> <li>Repeat the same phrase over and over again.</li> <li>Walk away.</li> <li>All of the above.</li> </ul>   | c. Show an awareness of the person(s) he is addressing.  Yes  No  I don't know  d. Encourage others to make healthy choices.  Yes   |
|--|---|
| 21. Which questions should a person answer before deciding to have sex?  What are my values and beliefs about sex?  What would my parents or family think about me being in a sexual relationship?  Am I feeling pressured to have sex?  All of the above.   | <ul> <li>No</li> <li>I don't know</li> <li>e. Demonstrate passion or conviction for the issues.</li> <li>Yes</li> <li>No</li> <li>I don't know</li> </ul>   |
| <ul> <li>22. Which of the following is NOT a way to show friendship and caring for someone who is infected with HIV or has AIDS: <ul> <li>Ask if he or she would like to join your games and activities.</li> <li>Treat him or her like you would any other friend.</li> <li>Show concern by telling others about someone's HIV infection, even if you don't have permission.</li> <li>Listen when he or she feels like talking.</li> </ul> </li> <li>For the next questions (23a-e), choose "Yes, "No," or "I don't know."</li> </ul> | 24. Do you set goals for yourself?  Yes, always Yes, most times Yes, sometimes No  25. When you set a goal, do you plan what you will need to do to reach it? Yes, always Yes, most times Yes, sometimes No |
| <ul> <li>23. Andrew wants to encourage, or advocate for, people to follow guidelines for avoiding HIV and STIs. He should:</li> <li>a. Take a clear health-enhancing stand.  Yes  No I don't know</li> <li>b. Support his position with relevant facts.  Yes  No I don't know</li> </ul>   |   |



# Michigan Model for Health™ Pre-/Post-Test ANSWER KEY

#### **HIV/STI Prevention**

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| A website ending in .tv.  None of the above, don't use the Internet.  | In a soft voice, say, "I really shouldn't go to the party."   |
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| All of the above.   | 19. To improve communication when a friend is talking, you should do the following:   |
| <ol> <li>Most U.S. students in grade 7, 8 and 9 have not<br/>had sexual intercourse.</li> </ol>   | <ul> <li>While your friend is talking, be thinking<br/>about what you'll say next.</li> </ul>   |
|   | Ask questions to understand what he or she is saying.   |
| _   | Continue to do something else, but quietly.   |
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| Walk away.  All of the above.  | d. Encourage others to make healthy choices  Yes  No   |
| <ul> <li>21. Which questions should a person answer before deciding to have sex?</li> <li>What are my values and beliefs about sex?</li> <li>What would my parents or family think about me being in a sexual relationship?</li> <li>Am I feeling pressured to have sex?</li> <li>All of the above.</li> </ul>   | e. Demonstrate passion or conviction for the issues.  Yes  No  I don't know  |
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| <ul> <li>b. Support his position with relevant facts.</li> <li>Yes</li> <li>No</li> <li>I don't know</li> </ul>  |  |
|  |  |