

# National Safe Tractor and Machinery Operation Program

The National Safe Tractor and Machinery Operation Program (NSTMOP) is a project of Hazardous Occupations Safety Training in Agriculture (HOSTA) for youth ages 14 and 15.



## Why NSTMOP?

Since 1969, the U.S. Department of Labor has declared many agricultural tasks to be hazardous to youth younger than 16. With certain exemptions, employment of youth under 16 for tasks that require operation of a tractor and machinery is illegal unless the youth are certified. By successfully completing this certification program, 14 and 15 year old youth may legally operate farm tractors and powered machinery for hire which they otherwise would not be allowed to operate under the U.S. Department of Labor's Hazardous Occupations Order in Agriculture.

## NSTMOP and HOSTA

The National Safe Tractor and Machinery Operation Program (NSTMOP) is a project of the United State Department of Agriculture Cooperative States Research, Education and Extension Service's Hazardous Occupations Safety Training for Agriculture (HOSTA) Program. It was developed to respond to the need for resources to inform and support the Youth Farm Safety Education and Certification Regulation which is administered by the U.S. Department of Labor.

Training is designed to consistently cover core content areas including safety basics, agricultural hazards, tractors, connecting and using implements with tractors and materials handling. Testing includes a written exam along with skills and driving tests.

## NSTMOP Overview

The National Safe Tractor and Machinery Operation Program (NSTMOP) was developed through a collaborative effort involving Penn State University, Ohio State University, and the agricultural division of the National Safety Council.

The project was funded by the U.S. Department of Agriculture, National Institute of Food and Agriculture. This program is now managed solely by Penn State.

The NSTMOP was originally developed and designed for 14- and 15-year-olds seeking employment in production agriculture. The U.S. Department of Labor's Hazardous Occupations Order in Agriculture (AgHOs) regulation prohibits 14- and 15-year-olds from operating farm tractors and attached powered equipment unless the youths have successfully completed an approved safe tractor and machinery operation training program. For more information about these regulations, visit the website of the [U.S. Department of Labor](#).



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## What's Included for Certification

The training is led by local county extension or high school agricultural educators. Subjects covered include general agricultural safety, tractor and equipment operation, and highway transportation. Students are certified after successfully passing a fifty-question written knowledge test and successfully passing both a operating skills test and a pre-op/driving test.

## Student Curriculum

The NSTMOP recommends 24 hours of instruction, divided into six modules, that includes task sheets and skills and safe-driving instruction. The task sheets serve as the basis of the program.

Now in its third edition, this student manual provides in-depth information on what youth can expect when working on a farm, safety basics, agricultural hazards, how to operate a tractor, and how to handle materials, among other important topics. This latest edition features updated regulations, vibrant and detailed illustrations and photos, and an improved user-friendly layout, and includes:

- An introduction to the NSTMOP
- A program outline for the six modules
- A driving test layout and evaluation form
- A list of core competencies that each student should master
- Instructional task sheets

While required for NSTMOP training courses, this manual is available to any adult or young person who wants to learn more about agricultural safety.

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## Instructor Information

The National Safe Tractor and Machinery Operation Program (NSTMOP) is primarily a training program for 14- and 15-year-olds seeking employment in production agriculture.

Completing the NSTMOP constitutes compliance with the training requirements of the U.S. Department of Labor's Hazardous Occupations Order in Agriculture (AGHOs) law.

The curriculum of this program can also be used to teach new and inexperienced tractor operators of all ages and backgrounds on how to safely operate farm tractors and other machinery. In addition, the curriculum provides an introduction to farm and ranch hazards and risks. When students that are 16 years of age and older complete the program, formal evaluation (the written knowledge, operating skills and pre-op/driving tests) and the Department of Labor certificate of completion are not required. Instructors might nevertheless wish to take advantage of these components to

add structure to their teaching.

## Instructor Requirements

To become an instructor, you must pass this course with a minimum score of 70%. Once certified, you will gain access to additional instruction materials, including the instructors' manual, PowerPoints to help you teach safety materials, and more.

For those seeking to become a certified NSTMOP Instructor our new online course can be accessed at Instructor Training Course.

If you have questions about the program please email Peggy Newel at [png1@psu.edu](mailto:png1@psu.edu) or call 814-865-7685.

After the instruction is complete, each student must complete a 50-question written knowledge test and obtain a minimum passing score of 70%. Students who successfully pass the written knowledge test are then permitted to take the operating skills and pre-op/driving tests. Upon successful completion of all parts of the NSTMOP, students receive a formal DOL certificate of completion.

## Student Information

Youth ages 14 and 15 years old seeking employment in production agriculture must comply with the training requirements of the U.S. Department of Labor's Hazardous Occupations Order in Agriculture (AgHOs) law.

As part of meeting the training requirements, youth must complete an approved training program. The National Safe Tractor and Machinery Operation Program (NSTMOP) is a comprehensive program that consists of 24 hours of intensive instruction that incorporates the use of task sheets accompanied by skills and driving instruction. After completing classroom instruction, each student must complete a 50-question written knowledge test and obtain a minimum passing score of 70%. Once a student successfully passes the knowledge test, he or she is then be permitted to take the program's operating skills and pre-op/driving tests. Upon successful completion of all parts of the NSTMOP, the student receives a formal USDOL certificate of completion.

Age	Can take class	Can participate in practice driving	Can be tested
<12	No	No	No
12 through 13	Yes	No	No
14 through 15	Yes	Yes	Yes
16+	Yes	Yes	Yes, but not required

Important: Age of Participants

## Curriculum

Task sheets are the basis of the NSTMOP and were developed as part of a new and updated curriculum. Elements of the curriculum can be obtained through the following two avenues:

Now in its third edition, this student manual provides in-depth information on what youth can expect when working on a farm, safety basics, agricultural hazards, how to operate a tractor, and how to handle materials, among other important topics. This latest edition features updated regulations, vibrant and detailed illustrations and photos, and an improved user-friendly layout, and includes:

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If you need to locate an NSTMOP instructor in your area, contact the NSTMOP office at [nstmop@psu.edu](mailto:nstmop@psu.edu). Please include your state and county.

## Frequently Asked Questions

These questions are derived from the NSTMOP instructors.

### **Q. Can I teach this program to youth (14 and 15 year olds) if I am not an Extension Educator or Ag Instructor?**

Yes, however an Extension Educator or an Agriculture Instructor should be present during testing and sign off on the training as the Certifying Authority for the USDOL Certificate of Training. The USDOL Certificate of Training requires a signature for the person conducting the training and a signature for the Certifying Authority. Extension Educators and Vocational Agricultural Instructors are considered the only individuals who can serve in the capacity as the Certifying Authority. If providing the training, you will need to sign the USDOL Certificate of Training and have an Extension Educator or Agriculture Instructor serve as the Certifying Authority. As a Certifying Authority, Extension Educators and Vocational Agricultural Instructors should review and verify instructional content/delivery, testing procedures as well as students' performance.

### **Q. How old does a person need to be to become an NSTMOP instructor?**

There are two answers to this question.

1. If an instructor is teaching the NSTMOP course to 14 and 15 year olds, this should be done under the supervision of either extension educators or vocational agricultural teachers. These individuals are often referred to as the Program Leaders or Community Lead Instructors. The USDOL certificate requires that an Ag Instructor or an Extension Educator must sign the certificate.

2. If someone wants to become an NSTMOP instructor to teach 16 year olds and up, there are no regulations on age. However they should definitely be experienced and mature enough to teach tractor safety to others. To be an effective instructor for either group, you should be familiar with agricultural production practices, be knowledgeable about tractors and machinery, and have a general awareness of agricultural hazards.

### **Q. I do not know how to drive a tractor. Can I still become an NSTMOP Instructor?**

If you are uncertain of your tractor operation skills, plan to have an additional instructor who possesses this knowledge and experience to assist you. Many times, NSTMOP instructors will coordinate with volunteers to facilitate the tractor operations skills practicum during the course. If you decide to become an NSTMOP instructor, it is recommended to practice and familiarize yourself with skill activities and technical content either through professional development workshops or finding a local mentor through the NSTMOP program. We highly recommend that the instructor be an experienced driver with the ability to safely back the tractor in order to hitch properly to farm implements.

### **Q. Once a student has received the certification, can they drive a tractor on a public road?**

Each state's legislative body has passed laws that govern motor vehicle use in their state. Since farmers sometimes use the highways to transport farm equipment and products, special rules are included in the state motor vehicle code to assure agricultural producers use the roads safely. In Pennsylvania, 14 and 15-year-old youths can operate farm tractors only on public roadways that bisect or adjoin their place of residence.

Please review Task Sheets 1.2.5 State Vehicle Codes and 4.14 Operating the Tractor on Public Roads for more information. Be sure you check with your State's Codes to be compliant.

### **Q. Where can certified instructors download course materials?**

Instructors can download course materials from the HOSTA NSTMOP Instructor Material group on our online course management system. Please contact [png1@psu.edu](mailto:png1@psu.edu) for information.

### **Q. What paperwork do I need to fill out at the end of a course?**

For each student, you should fill out three copies of the Department of Labor Certificate of Training (appendix J in the instructor manual): One copy for your records, One copy for

the student for his or her records, and One copy for the student to give to his or her employer.

**Q. How long do I need to keep my student records?**

It is recommended that you keep documentation on the completion of training for three years or until the student reaches the age of 16.

**Q. I have been a HOSTA master trainer since 2003 and would like to hold a workshop to train community lead instructors. Are there updated materials since this time? Am I responsible for providing training materials?**

- Yes, materials have been updated. Both the student manual and Instructor manual were updated in 2013.
- Yes, instructors should provide training materials. Student task sheets and manual can be downloaded from the " Student Information " section. Complete manuals can be purchased from Hobar.

**Q. Can I substitute a skid steer or another vehicle in place of the tractor for this certificate training program?**

No. This certificate program is specifically designed for Tractors (of over 20 power-take-off (PTO) horsepower) only.

**Q. When is a support staff person available if I have questions or issues?**

The NSTMOP office is open from 8:30 a.m. to 4:30 p.m. (EST) Monday through Thursday, except on holidays. There is not a support person available on weekends, holidays, or after 4:30 p.m. (EST). We encourage you to prepare for courses ahead of time if they will take place outside of regular business hours. If you have questions, please contact the NSTMOP office at 814-865-7685 or via email at [nstmop@psu.edu](mailto:nstmop@psu.edu).

**Q. Do I have any special liability concerns to think about if I hold a tractor safety training for youth?**

The liability associated with conducting the NSTMOP is no different from that of any other educational program or activity that Extension agents or agriculture teachers engage in. As long as you have some form of approval as an instructor, and you are following normal teaching protocol, then you have the normal liability protection that all Extension agents and agriculture teachers have when they are teaching approved courses or curriculum. All state Extension services and high schools have 501(c)3 status as nonprofit organizations. Specialists, agents, and teachers are all employees and covered by their employer's liability policy or policies. If a county, state, or school normally has youths sign additional liability waiver forms or collects a small fee for insurance, then the organization should also do so for this program. Note that all practice sessions with tractors and equipment and all tests should be held on property that has injury and liability protection.

**Q. Our school district does not own a tractor. What if we use a "borrowed" tractor for our classes, how does this impact our liability?**

Your school district should contact their insurer to be sure you are following the policies that are contained within your contract. They should also be able to advise you if you would need any additional liability waiver forms. Most one day polices are for a small fee, which could be integrated into the course fee, if charged.

**Q. A student younger than 14 years old wants to learn how to drive a tractor. Can I teach them during my NSTMOP course?**

Students younger than 14 years old are not permitted to drive a tractor except on their home farm. Instructors should not let students younger than 14 years old drive a tractor at any time during the course. A 13-year-old can sit through the classroom **only** part of the training, but per regulation, they cannot do any tractor driving, skills testing, or practicing as part of the course until they are 14 years old. Note: It is recommended that the Written Exam, Operating Skills, and Driving Test be given within 60 days of each other.

**Q. Is a 16-year old required to have this certificate to work on a farm?**

According to the U. S. Department of Labor Fair Labor Standards Act of 1938 which was amended in 1968, individuals 16 years of age and older can be employed in agriculture without this certification. However, agricultural safety and health training is encouraged for farmworkers of any age.

**Q. A previous student received her certificate in New York and is moving to Kentucky. Can she use her certificate in Kentucky?**

The curriculum is universal and applies to any state in the United States. However, it is recommended that you check with each state's department of labor to see if their state labor work regulations for youth under the age of 18 are more restrictive than the federal regulations. The most restrictive regulations normally take precedence.

**Q. On more than one occasion, I have had young women from various religious sectors ask if they can participate in the NSTMOP training. My concern is for their safety due to wearing loose clothing. It is recommended in the Instructor manual that proper dress for test participation should be snug-fitting clothing and/or long pants. Inappropriate dress includes baggy pants, shorts, sandals, jewelry, watches, and necklaces. Should I permit them to take the Operating and Driving Exam?**

Safety is always our number one concern. The NSTMOP does not recommend wearing any type of loose clothing or accessories during the Operating skill test and the Driving test. The final decision, however, about what to allow always rests with the instructor. You may be able to find a reasonable accommodation by speaking with the student and parents. The official USDA certificate of completion cannot be issued if the student does not complete all three parts of the testing procedure.

**Q. How does the Independent Study option work?**

The NSTMOP materials are designed to be used in a variety of instructional settings. They can be used in:

- a traditional classroom setting (secondary level agricultural classroom setting),
- an Extension/4-H program,
- an independent study format, or
- a combination of these.

There are 48 Task Sheets identified as core (C) that cover the MCCA topics and should be used to prepare students for the NSTMOP Written Test. Written test questions come from these Task Sheets. To meet current requirements of the USDOL HOOA exemption, at least 24 hours should be devoted to these topics.

Students who cannot access 4-H or secondary agriculture classes can use Task Sheets of the NSTMOP program and other educational resources (i.e. Deere & Company's Farm and Ranch Safety Management book, other written texts, other instructional task sheets, student worksheets, tractor and machine operator and service manuals, demonstrations, vendor tractor and equipment safety videos, reputable Internet resources, AgSafety4U online course and guest speakers) along with the Skills and Driving test guidelines and forms, to prepare for testing through the nearest Community Lead Instructor (CLI). These other resources are not substitutes for the NSTMOP course. The student must still maintain contact with the CLI and complete and pass all required exams.

Success for the student selecting the independent study option is increased by:

- The student working with a mentor (parent, teacher, neighbor, farmer, etc.), to answer questions that come up during the study of the Task Sheets.
- The student maintaining contact with the CLI to communicate progress, requesting sample test questions to measure strengths and weaknesses encountered, and to be on track for meeting test dates and times.

The CLI must maintain contact with the student to assure focus and progress toward test date(s). **Note:** It is recommended that the Written Exam, Operating Skills and Driving Test, be given within 60 days of each other.

### **Q. How do I handle students who have an Individual Education Plan (IEP) and want to participate in the NSTMOP?**

There are several factors that impact the answer to this question, and instructors must always use professional judgment in responding to the particular needs of individual students.

The NSTMOP is not a mandatory program or course offering. This means that students are not required to take the NSTMOP, no institution is required to offer the course, and instructors are not required to modify an IEP so that a student can participate in the NSTMOP.

In addition, the NSTMOP is primarily for students who expect to be employed outside of school time on a farm, outside of

school time, by someone other than a parent or legal guardian. If employment operating agricultural equipment is not a realistic expectation of the IEP student or his or her parents or guardians, the student need not complete the program.

Finally, note that your employer might require informed consent (IC) before the student can participate in the NSTMOP. The IC document must be signed by a parent or legal guardian and the student. The IC indicates, among other things, that the student is 14 years of age and "[does] not have any physical or mental limitations for participation in this project." The NSTMOP should not be offered to anyone for whom this statement would be inaccurate. In most cases, a phone call to the parent or legal guardian to explain the purpose and requirements of the NSTMOP resolves any issues.

IEP students who do not complete the program might nevertheless benefit from some level of participation in the NSTMOP. For instance, they may be able to participate in all learning activities, such as educational sessions and the written exam, aside from the skills and driving tests (including any practice sessions). Any student may have test questions read aloud to him or her and may have extra time to complete the written exam. If you allow an IEP student to participate in only the educational part of the NSTMOP, you do not need to obtain an IC, nor do you need a program evaluation form from the student.

## **Contact Information**

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