



Agricultural Safety

Study Guide

Assessment:
6003 Agricultural Safety



Overview

Agricultural Safety is a foundational exam for all agricultural students to measure their knowledge about safety practices in a variety of agricultural settings. Agricultural Safety is not designed to be a stand alone course, but rather a specialized set of objectives that can be reinforced within other agricultural-related courses.

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The Agricultural Safety assessment is endorsed by Oklahoma Farm Bureau (okfarmbureau.org) and Access Midstream (co.williams.com/accessmidstream). Oklahoma Farm Bureau is an independent, non-governmental, voluntary organization of farm and ranch families united for the purpose of analyzing their problems, and formulating action to achieve educational improvement, economic opportunity, and social advancement and thereby, to promote the national well-being. Farm Bureau is local, county, state, national, and international in its scope and influence, and is non-partisan, non-sectarian, and non-secret in character. Farm Bureau is the voice of agricultural producers at all levels.

Access Midstream Partners L.P. (NYSE:ACMP) and Williams Partners L.P. (NYSE:WPZ) merged on February 2, 2015. Williams (NYSE:WMB) is the general partner of the merged entity and owns controlling interest. Williams is a leading provider of large-scale infrastructure that connects North America's best supplies of natural gas with markets where it creates the most value — including cleaner electric-power generation; heating, cooling and cooking; manufacturing; and as a feedstock for an astounding array of products and materials that are part of everyday life, from high-tech to high-stretch. Specifically, Access Midstream endorsed the Underground Pipeline portion of the Agricultural Safety assessment.

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CareerTech and Competency-Based Education: A Winning Combination

Competency-based education uses learning outcomes that emphasize both the application and creation of knowledge and the mastery of skills critical for success. In a competency-based education system, students advance upon mastery of competencies, which are measurable, transferable outcomes that empower students.

Career and technology education uses industry professionals and certification standards to identify the knowledge and skills needed to master an occupation. This input provides the foundation for development of curriculum, assessments and other instructional materials needed to prepare students for wealth-generating occupations and produce comprehensively trained, highly skilled employees demanded by the work force.

Tools for Success

CareerTech education relies on three basic instructional components to deliver competency-based instruction: skills standards, curriculum materials, and competency assessments.

Skills standards provide the foundation for competency-based instruction and outline the knowledge and skills that must be mastered in order to perform related jobs within an industry. Skills standards are aligned with national skills standards and/or industry certification requirements; therefore, a student trained to the skills standards is equally employable in local, state and national job markets.

Curriculum materials and textbooks contain information and activities that teach students the knowledge and skills outlined in the skills standards. In addition to complementing classroom instruction, curriculum resources include supplemental activities that enhance learning by providing opportunities to apply knowledge and demonstrate skills.

Certification Assessments test the student over material outlined in the skills standards and taught using the curriculum materials and textbooks. When used with classroom performance evaluations, certification assessments provide a means of measuring occupational readiness.

Each of these components satisfies a unique purpose in competency-based education and reinforces the knowledge and skills students need to gain employment and succeed on the job.

Measuring Success

Evaluation is an important component of competency-based education. Pre-training assessments measure the student's existing knowledge prior to receiving instruction and ensure the student's training builds upon this knowledge base. Formative assessments administered throughout the training process provide a means of continuously monitoring the student's progress towards mastery.

Certification assessments provide a means of evaluating the student's mastery of knowledge and skills. Coaching reports communicate assessment scores to students and provide a breakdown of assessment results by standard area. The coaching report also shows how well the student has mastered skills needed to perform major job functions and identifies areas of job responsibility that may require additional instruction and/or training.

Agricultural Safety Assessment Information

What is the Introduction to Agricultural Safety assessment?

The Agricultural Safety assessment is a foundational exam for students in agricultural-related courses. The assessment provides an indication of student mastery of basic knowledge and concepts necessary for success in this area.

How was the assessment developed?

The assessment was developed by the CareerTech Testing Center. Items were developed and reviewed by a committee of subject matter experts.

What does the assessment cover?

Specifically, the test includes multiple-choice test items over the following areas:

Agricultural Safety (50 questions)

Identify Confined Spaces	10%
Know Machinery and Vehicles	10%
Understand All-Terrain Vehicles	8%
Know Livestock and Other Animals	10%
Define Exposure Hazards	10%
Understand Severe Weather	10%
Understand Electricity	8%
Recognize Fires and Wildfires	8%
Demonstrate First Aid and Emergency Care	10%
Recognize Hand Tools, Power Tools, and Ladders	8%
Understand Underground Pipelines	8%

What are the benefits of using the assessment?

Students receive a certificate for each assessment that he/she passes. This certificate may be included in his/her portfolio and used to communicate the student's mastery of the subject matter to potential employers.

When should the assessment be taken?

The CareerTech Testing Center recommends that students take this assessment as soon as possible after receiving all standards-related instruction, rather than waiting until the end of the school year.

Is the assessment timed?


No. Although students may take as long as they need, most finish the assessment within one hour.

What resources can students use on these assessments?

Students are allowed to use calculators and scratch paper on CTTC assessments; however, these items must be provided by the testing proctor and returned to the proctor before the student's exam is submitted for scoring. Calculator apps on cell phones and other devices may not be used on these assessments.

What accommodations can be made for students with Individualized Education Plans (IEPs)?

Accommodations are allowed for students with an Individualized Education Plan. Examples of allowable accommodations include:

- Extended time — This assessment is not timed; therefore, students may take as much time as needed to finish. The assessment must be completed in one testing session.
- Readers — A reader may be used to read the assessment to a student who has been identified as needing this accommodation.
- Enlarged text — Students needing this accommodation can activate this feature by clicking the  icon in the upper right corner of the screen.

What can students expect on Test Day?

All CTTC assessments are web-based and delivered exclusively by a proctor in the school's assessment center. The proctor **cannot** be an instructor or anyone who was involved with the student during instruction.

Assessments are delivered in a question-by-question format. When a question is presented, the student can select a response or leave the question unanswered and advance to the next question. Students may also flag questions to revisit before the test is scored. All questions must be answered before the test can be submitted for scoring.

After the assessment is scored, the student will receive a score report that not only shows the student's score on the assessment, but also how the student performed in each standard area.

Can students retake the test?

- Remediation is recommended prior to retesting.
- If a participant fails on the first (1st) attempt to pass a CTTC test, a waiting period between the first (1st) & second (2nd) attempt is not required.
- After the second (2nd) attempt, the participant must wait **three (3) calendar days** before retaking the examination.
- A participant is **not allowed** more than three (3) test attempts.
- A student **may not** retake a test that he/she has already passed.

Standards and Test Content Agricultural Safety Study Guide

Identify Confined Spaces (5 Questions)

1. Define hazardous atmospheres
2. Understand manure pits
3. Know grain storage hazards

Know Machinery and Vehicles (5 Questions)

1. Identify vehicle hand signals
2. Recognize the Slow-Moving Vehicle Emblem
3. Understand tractor, harvester, and machinery hazards
4. Know Roll-Over Protective Structures (ROPS)
5. Demonstrate servicing safety
6. Demonstrate road safety
7. Understand moving large hay bales
8. Know Power Take-Offs (PTO) and drivelines



Understand All-Terrain Vehicles (4 Questions)

1. Know operator guidelines for ATVs

Know Livestock and Other Animals (5 Questions)

1. Identify animal behavior factors
2. Understand livestock handling hazards
3. Understand animal disease hazards
4. Define horse riding safety
5. Understand dog bites and rabies



Define Exposure Hazards (5 Questions)

1. Identify and treat heat and cold hazards
2. Understand and protect from skin hazards
3. Recognize poisonous plants
4. Protect and treat poisonous plant exposure

Understand Severe Weather (5 Questions)

1. Understand and protect against thunderstorms, tornadoes, and winter storms

Understand Electricity (4 Questions)

1. Know electricity basics
2. Define static electricity
3. Understand grounding
4. Know about power lines in regards to agricultural machinery
5. Know electrical safe work practices



Recognize Fires and Wildfires (4 Questions)

1. Define fire hazards
2. Know common causes of fires
3. Understand how to reduce fire danger
4. Construct wildfire safety zones
5. Know how to use a fire extinguisher

Demonstrate First Aid and Emergency Care (5 Questions)

1. Understand how to treat cuts
2. Know how to recognize and treat sprains and strains
3. Understand back pain and safe lifting
4. Know how to treat different degrees of burns
5. Understand hot and cold weather emergencies
6. Recognize signs of a heart attack
7. Know how to treat poisonous insect and snake bites



Recognize Hand Tools, Power Tools, and Ladders (4 Questions)

1. Know safety guidelines when working with hand tools
2. Know safety guidelines when working with power tools
3. Know safety guidelines when working with ladders

Understand Underground Pipelines (4 Questions)

1. Recognize pipeline rights-of-way
2. Identify pipeline marker signs
3. Know pipeline products and their hazards
4. Understand tolerance zones and possible leaks
5. Know how to utilize one-call centers



Sample Questions

- _____ 1. Lockout/tagout precautions primarily reduce the risk of:
- a. electrocution.
 - b. suffocation.
 - c. falls.
 - d. entrapment.
- _____ 2. What is the most important step to take to prevent injury while servicing a piece of machinery?
- a. Stop the engine.
 - b. Remove the protective shields.
 - c. Release the brake.
 - d. Engage the PTO.
- _____ 3. Which infectious disease is transmitted by ticks and mites?
- a. Lyme disease
 - b. rabies
 - c. ringworm
 - d. tetanus
- _____ 4. If caught outside during a winter storm, it is most important to:
- a. build or seek protection from the wind.
 - b. eat as much snow as possible to prevent dehydration.
 - c. keep moving to promote circulation.
 - d. remove unnecessary clothing to prevent sweating.
- _____ 5. To prevent wildfire, tree limbs should be at least how many feet from the ground?
- a. 5'
 - b. 10'
 - c. 15'
 - d. 30'

Sample Questions — Key

1. Lockout/tagout precautions primarily reduce the risk of:
 - a. electrocution. Correct
 - b. suffocation. Incorrect
 - c. falls. Incorrect
 - d. entrapment. Incorrect

2. What is the most important step to take to prevent injury while servicing a piece of machinery?
 - a. Stop the engine. Correct
 - b. Remove the protective shields. Incorrect
 - c. Release the brake. Incorrect
 - d. Engage the PTO. Incorrect

3. Which infectious disease is transmitted by ticks and mites?
 - a. Lyme disease Correct
 - b. rabies Incorrect
 - c. ringworm Incorrect
 - d. tetanus Incorrect

4. If caught outside during a winter storm, it is most important to:
 - a. build or seek protection from the wind. Correct
 - b. eat as much snow as possible to prevent dehydration. Incorrect
 - c. keep moving to promote circulation. Incorrect
 - d. remove unnecessary clothing to prevent sweating. Incorrect

5. To prevent wildfire, tree limbs should be at least how many feet from the ground?
 - a. 5' Incorrect
 - b. 10' Incorrect
 - c. 15' Correct
 - d. 30' Incorrect

Abbreviations, Symbols and Acronyms

The following is a list of abbreviations, symbols, and acronyms used in the Agricultural Safety study guide and on the Agricultural Safety assessment.

am	before noon
ATV	All-Terrain Vehicle
pm	after noon
SMV	Slow Moving Vehicle
mph	miles per hour
°	Degree

One word

flashback
frostbite
pipeline
ringworm

Two words

first aid
heat stroke
trench foot
wind chill

Agricultural Safety Style Sheet

Hyphenated words:

back-up
fine-tipped
fire-related
medi-flight
non-mechanical
oxygen-deficient
pre-emergency
real-time
safe-controlled
self-contained
up-slope

One word

flashback
frostbite
pipeline
ringworm

Non-Hyphenated words:

dehydration
speedometer

Two words

first aid
heat stroke
trench foot
wind chill

Test Taking Strategies

This section of the study guide contains valuable information for testing success and provides a common-sense approach for preparing for and performing well on any test.

General Testing Advice

1. Get a good night's rest the night before the test — eight hours of sleep is recommended.
2. Avoid junk food and “eat right” several days before the test.
3. Do not drink a lot or eat a large meal prior to testing.
4. Be confident in your knowledge and skills!
5. Relax and try to ignore distractions during the test.
6. Focus on the task at hand — taking the test and doing your best!
7. Listen carefully to the instructions provided by the exam proctor. If the instructions are not clear, ask for clarification.

Testing Tips

1. Read the entire question before attempting to answer it.
2. Try to answer the question before reading the choices. Then, read the choices to determine if one matches, or is similar, to your answer.
3. Do not change your answer unless you misread the question or are certain that your first answer is in.
4. Answer questions you know first, so you can spend additional time on the more difficult questions.
5. Check to make sure you have answered every question before you submit the assessment for scoring — unanswered questions are marked in.



