



BULLETIN OF INFORMATION

Introduction

The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) developed the Fundamental Use of Surgical Energy™ (FUSE) program to meet the need for increased education and training in the principles and properties of operating electrosurgical instruments safely. SAGES encourages learning and applying these fundamental skills in order to ensure a minimal standard of care for all patients undergoing surgery.

FUSE is an educational program designed to certify that a successful candidate has demonstrated the knowledge fundamental to the safe use of surgical energy-based devices in the operating room, endoscopic suite and other procedural areas. The educational module consists of a web-based multimedia presentation of didactic content which is available, free-of-charge, at www.fusedidactic.org. The assessment is a computer-based cognitive examination, available for a fee.

Those who successfully complete the assessment components will have demonstrated the basic knowledge fundamental to the safe use of energy-based surgical devices.

FUSE Assessment Development and Purpose

The FUSE examination consists of multiple-choice questions administered via computer and designed to assess the understanding and application of the basic principles associated with the use of electrosurgery in the operating room.

The assessment has been carefully designed and examined by experts within the fields of General Surgery, Gynecology, Urology, Anesthesia, Nursing and Energy Use. Formal review sessions have ensured that the material included in the assessment is relevant to the safe use of energy-based surgical devices in the operating room and appropriate to the stated purpose of the FUSE Program. The test questions have been previously field-tested for efficacy and the FUSE Test Committee continually reviews their statistical properties. An ongoing research program conducts investigations into the psychometric properties of the assessments and gathers evidence regarding the reasonableness of the decisions and inferences made from the assessment scores.

FUSE Assessment Description

Test takers are given 90 minutes to complete the FUSE examination which consists of 80 multiple-choice questions administered via Webassessor, a secure online testing website.

FUSE Eligibility and Test Scheduling

The FUSE didactics are publically available for anyone to review. The FUSE exam, while available to anyone whom would like to purchase a test voucher, has only been validated for Physicians (MD, DO, or MBBS or equivalent) and Registered Nurse First Assistants (RNFA's) who have spent a minimum of one year in the operating room. Upon completion of the online didactic curriculum, and once in possession of a FUSE test voucher, participants may schedule their FUSE Test. The FUSE assessment must be taken at an approved Test Center or at either the SAGES Annual Meeting or ACS Annual Clinical Congress. Test takers who reside outside of the U.S. may take the FUSE assessment at Kryterion Authorized Test Centers (KTN), a global network of 1,000+ testing locations. Active U.S. military personnel stationed outside of the United States may also take the FUSE exam online using Kryterion's Online Proctoring (OLP) services.

All test vouchers expire one year from the date of purchase and have the expiration date printed directly in the center of the certificate. Tests must be completed by this date as extensions will only be granted in rare and extreme circumstances, and must be requested in writing to the FUSE Program Director and approved by the FUSE Committee Co-Chairs.

FUSE Program Purchase Process

1. To purchase the FUSE program, please follow the instructions posted on our website www.fuseprogram.org

To contact the SAGES office:
SAGES FUSE Program
11300 W. Olympic Blvd. Suite 600
Los Angeles, CA 90064
Phone: 310.437.0544 ext. 139
Fax: 310.437.0585



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e-mail: info@fuseprogram.org

2. After obtaining your FUSE test voucher, and completing your review of the didactic materials, test takers may go to www.webassessor.com/sages_fuse to schedule their exam.
3. At the time of the exam, you must present your FUSE Test Voucher and a valid form of picture identification. Testing is available by appointment only.
4. Retake Policy – If you fail the assessment, you must retake it in order to receive a FUSE Certificate. Prior to scheduling a retake, any participant who failed the assessment must purchase a re-test voucher (\$125) at www.fuse.surgicalfundamentals.org/. Please note the waiting periods below:

1st Retest – 30 days waiting period, from initial test date, before you are eligible to retest

2nd Retest – 6 month waiting period, from previous test date, before you are eligible to retest

If you have attempted to pass the exam on three separate occasions, a whole new registration process and payment is required. This fee will not be covered by any grant offered through SAGES and payment must be made prior to scheduling your test appointment.

If you pass the assessment, you may not retest simply to attempt a higher passing score.

Responsibilities of Assessment Participants

Assessment participants must not subvert or attempt to subvert the assessment process. The assessment materials are the property of SAGES and no reproduction or distribution of the materials is permitted. Participants must not engage in or encourage irregular test behavior such as, but not limited to, copying, printing, memorizing, reproducing and/or distributing assessment materials, possessing unauthorized communication devices or seeking unauthorized help from others during the assessment and/or falsifying information on registration forms. Participants must follow directions given at the administration site and refrain from interfering with the performance of other participants. If there is evidence that irregular behavior has occurred, the reporting of scores may be delayed or retracted pending further investigation.

Preparation for the Assessment

The FUSE educational modules, available at www.fusedidactic.org, provide a resource for the material included in the assessments as they have been prepared as such and comprehensively cover the basic knowledge fundamental to the safe use of surgical energy-based devices in the operating room, endoscopic suite and other procedural areas.

The didactic material covers:

- Fundamentals of Electrosurgery
- Mechanisms and Prevention of Adverse Events
- Monopolar Devices
- Bipolar Devices
- Radiofrequency for Soft Tissue Ablation
- Endoscopic Devices
- Ultrasonic Energy Devices
- Microwave Energy Systems
- Energy Devices in Pediatric Surgery
- Integration of Energy Systems with Implanted Cardiac Devices
- Prevention of OR Fires

Those wishing to study further can purchase the FUSE Manual, *The SAGES Manual on the Fundamental Use of Surgical Energy (FUSE)*, directly from Springer at the following site: <http://link.springer.com/book/10.1007/978-1-4614-2074-3/page/1>

A current list of related publications is kept on our website at the following link:
<http://www.fuseprogram.org/about/fuse-elsewhere/>



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The FUSE Assessment

Content The questions for the FUSE examination are based on the following major subject areas deemed applicable to the safe use of electro-surgical instruments:

- Fundamentals of Electrosurgery
- Mechanisms and Prevention of Adverse Events
- Monopolar Devices
- Bipolar Devices
- Radiofrequency for Soft Tissue Ablation
- Endoscopic Devices
- Ultrasonic Energy Devices
- Microwave Energy Systems
- Energy Devices in Pediatric Surgery
- Integration of Energy Systems with Implanted Cardiac Devices
- Prevention of OR Fires

While the content outline shown above is parallel to that used for the educational module, the two are considered to be independent of each other. The assessment will include questions related to the content outline that are deemed important for the practice of the safe use of surgical-energy based devices whether or not they have been thoroughly covered in the didactic educational program.

Questions are designed to test the understanding and application of principles and properties of operating electro-surgical instruments safely with as much emphasis as possible on clinical judgment and/or intraoperative decision-making.

Format The FUSE assessment consists of objectively scored single multiple-choice questions. For each question you are to select the one best alternative response based on the information given. There may be more than one response that fits the question but each question has only **one** best answer.

Time Considerations You will have 90 minutes to complete the FUSE test.

Scoring Procedures Answers to each question are scored as correct or incorrect by the computer and results for the total test are transmitted to the SAGES office for evaluation. The passing score is based upon obtaining a recommended level of proficiency on the assessment. The required level of proficiency is determined by the FUSE committee based on psychometric evaluation of the assessment and on data from prescribed standard-setting studies. As several forms of the cognitive assessment may be used, statistical procedures ensure that the level of performance needed to pass the different forms are equivalent.

Inclusion of Non-Scored Questions Some questions may be included in the cognitive assessment to improve the assessment process and to provide data for verifying the measurement properties of the assessments. Such questions are not counted in determining scores.

Score Reporting

Typically, score reports will be issued approximately three to four weeks after of the testing date. The FUSE score report indicates your score, states the passing score for the assessment and indicates if you passed and/or failed the assessment. Those who successfully pass the assessment will receive a FUSE Certificate of Completion.

Review of Scores Scoring for the exam is computer generated and then sent to the FUSE office for input into our database and certificate generation. Assessment appeals must be filed with the FUSE office in writing within six months of receiving the score.



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FUSE Testing and FUSE Test Centers

Since FUSE is a standardized and validated high-stakes exam, a trained FUSE proctor must be present to administer the exam.

US Only: FUSE Testing is available at regional FUSE Test Centers, the SAGES Annual Meeting, the ACS Clinical Congress and specially designated FUSE testing events. For a list of current FUSE Test Centers please visit www.fuseprogram.org

International Test Takers and U.S. Military Personnel Stationed Overseas: Test takers who reside outside of the United States may take the FUSE assessment at Kryterion authorized Test Centers (KTN) worldwide (1,000+ global locations). For a list of current Kryterion Test Centers, please visit: www.kryteriononline.com/Locate-Test-Center. For more information about KTN testing, please visit: www.fuseprogram.org/wp-content/uploads/2018/01/FUSE-Flyer-International-Interactive.pdf

U.S. Military Personnel Stationed Overseas: Active U.S. military personnel stationed outside of the United States may take the FUSE assessment in an online proctored (OLP) environment using a computer, webcam, microphone and Kryterion's Sentinel Secure software. For more information about online proctoring OLP, please visit: www.fuseprogram.org/wp-content/uploads/2018/01/FUSE-Flyers-Military-Personnel-Interactive.pdf

Continuing Medical Education (CME)

ACCME Accreditation Statement: The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) are accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor Continuing Medical Education for physicians.

The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) designates this enduring material for a maximum of **12 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Self-Assessment CME Credit, Part 2 of the American Board of Surgery (ABS) Maintenance of Certification (MOC) Program: This activity has also been designated as Self-Assessment CME credit, which can be used towards fulfilling Part 2 of the ABS MOC program. In order to claim Self-Assessment credit, attendees must successfully complete the associated exam. For additional information on the ABS MOC program and its requirements, visit the ABS website at: <http://home.absurgery.org/default.jsp?exam-moc>.

Full information concerning CME accreditation and instructions to receive CME Credits are available on the FUSE didactic materials website, through your user log in and password by clicking on the CME module.

*CME credit will be awarded to those who successfully complete the FUSE activity and/or the exam beginning August 15, 2014 through August 15, 2023.**

Continuing Nursing Education Contact Hours

12 Contact Hours

This continuing nursing education activity was approved by the Association of periOperative Registered Nurses, Inc., an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Activities that are approved by AORN are recognized as continuing education for registered nurses. This recognition does not imply that AORN or the ANCC Commission on Accreditation approves or endorses any product included in the presentation*

The contact hours for this activity will expire August 8, 2020.

*Those who successfully complete the FUSE materials, but do not want to take the assessment exam, may receive up to 10.5 CME/Contact Hours for a fee. For more information on obtaining CME/Contact Hours without taking the FUSE exam, contact 310-437-0544, ext. 149.