

AABB Prehospital Transfusion Certificate Program



Association for the
Advancement of
Blood & Biotherapies

SYLLABUS

Program Guide

AABB Prehospital Transfusion Certificate Program

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Technical Requirements and Contact Information for Assistance

This program is offered entirely online as independent, self-paced study through AABB's Education Platform located at <http://education.aabb.org>.

Technical Requirements - learners must:

- Have an internet connection to access the program.
- Navigate and be able to use the features of the program content and Education Platform.

This program can be viewed on a mobile device; however, a desktop or laptop computer is recommended. AABB strongly recommends registered learners use Google Chrome, Safari, Microsoft Edge, or Firefox browsers to access the program. Anyone using MAC or PC can download [Google Chrome](#). Internet Explorer is not supported.

Questions or requests for technical assistance should be directed to the AABB eLearning team at eLearning@aabb.org. A response should be expected Monday-Friday during business hours (US Eastern Standard Time or EST) within 72 hours of request.

Program Description

The AABB Prehospital Transfusion Certificate Program is designed to prepare emergency medical service (EMS) leaders to support the planning, implementation and ongoing management of prehospital blood transfusion programs. As the use of blood products in the prehospital environment expands to address preventable deaths from hemorrhage, many EMS agencies are seeking guidance on the clinical rationale, regulatory considerations, operational logistics, and quality management systems necessary to safely initiate these programs.

Through a series of modules, participants will explore the scientific and clinical evidence supporting early transfusion, the roles and responsibilities of EMS agencies and blood providers, regulatory and accreditation considerations, blood product selection and handling, operational workflows, and the quality systems required to ensure patient safety.

Developed by multidisciplinary experts from EMS, blood centers and hospitals, the program emphasizes collaborative implementation and shared accountability across the continuum of care.

Audience and goal	Program format
• EMS program managers, EMS field practitioners, medical directors, and implementation leaders responsible for establishing or managing prehospital transfusion programs. • Provides foundational understanding of the clinical, regulatory, operational, and quality framework needed to stand up a prehospital transfusion program prior to onboarding with a blood provider.	• Entirely online and self-paced through AABB's Education Platform. • Comprised of seven modules, with additional resources included within the program. • Estimated time to complete: approximately 7 hours and 15 minutes (which includes completion of all modules, assessments and evaluation).

Program Learning Objectives

Upon completion of the program, participants should be able to:

1. Collaborate effectively with blood providers, hospital partners, medical directors, and other stakeholders involved in establishing and sustaining a prehospital transfusion program.

2. Develop an operational framework that supports the safe, effective, and compliant delivery of prehospital transfusion.
3. Apply clinical, logistical, quality, safety, and communication principles to the implementation and ongoing evaluation of a prehospital transfusion program within their organization.

Prerequisites

There are no formal prerequisites for this program. However, the content is designed for EMS program managers, EMS field practitioners, medical directors, and implementation leaders who are responsible for establishing, overseeing, or managing prehospital transfusion programs. Learners in these roles will benefit most from the program's content and practical applications.

Participants are encouraged to complete the modules in the order presented, as concepts and information introduced in earlier lessons provide a foundation for subsequent modules.

Module Learning Objectives

Each module includes specific learning objectives describing the knowledge and competencies participants should acquire. Collectively, the module learning objectives support achievement of the program learning objectives.

Module 1: The “Why” - Clinical Rationale and Framework

Overview	This module builds an understanding of the scientific and clinical imperatives driving early transfusion in the prehospital environment.
Topics	• Trauma Mortality and Preventable Hemorrhage • Evolution of Blood-on-board Programs • Basic Transfusion Physiology • Risks and Benefits in Field Transfusion
Learning objectives	• Explain the epidemiology and mortality impact of trauma-related hemorrhage. • Describe the physiological basis for early transfusion and its effect on outcomes. • Identify risks and benefits of prehospital transfusion, including ethical considerations. • Recognize adverse reactions and outline immediate intervention steps.

Module 2: Understanding Blood Products

Overview	This module provides essential literacy in product types, storage, and risk-benefit considerations.
Topics	• Part 1: Blood Components in Prehospital Use • Part 2: Product Labeling, Traceability, and Documentation • Part 3: Storage and Handling • Part 4: Alloimmunization and Patient Selection
Learning objectives	• Differentiate between blood components used in prehospital settings (LTOWB, RBCs, plasma).

- Interpret ISBT-128 labeling and expiration details for traceability.
- Explain the role of the Circular of Information and other required documentation in defining indications, warnings, storage, administration, and traceability requirements for blood products used in the prehospital setting.
- Apply correct storage and handling protocols for blood products.
- Explain patient selection criteria and ABO/Rh considerations.

Module 3: Models of Implementation

Overview

This module provides an overview of different models' organizations can use to establish a prehospital transfusion program.

Topics

- Implementation Models and Program Readiness
- Regulatory Consideration and Stakeholder Partnerships
- Program Development and Operational Planning
- Case Studies and Lessons Learned

Learning objectives

- Implement chain-of-custody and temperature monitoring for blood products.
- Integrate transfusion workflows into EMS operations and dispatch systems.
- Document transfusion events accurately across EMS and hospital systems.
- Apply cost recovery and replenishment processes effectively.

Module 4: Logistics and Operations

Overview

This module equips learners with the operational knowledge to manage blood products safely throughout the prehospital transfusion lifecycle.

Topics

- Storage and Transport
- Documentation and Data Capture
- Return and Replenishment
- Financial and Contractual Logistics

Learning objectives

- Evaluate an organization's readiness for implementing a prehospital transfusion program, including medical direction, operational capabilities, and regulatory considerations.
- Describe the key steps required to develop and launch a prehospital transfusion program, from establishing partnerships and MOUs through SOP development, training, and program go-live.
- Identify strategies to support program sustainability, including budgeting, blood product rotation, cost recovery, grant opportunities, data-sharing agreements, and stakeholder communication.
- Apply lessons learned from implementation case studies to develop practical solutions for launching, maintaining, and improving a prehospital transfusion program.

Module 5: Patient Selection, Consent, and Field Administration

Overview	This module teaches foundational decision-making, consent principles, and reaction identification and management.
Topics	• Indications for Prehospital Transfusion • Consent and Documentation • Transfusion Administration in the Field • Adverse Reactions
Learning objectives	• Apply clinical criteria for patient selection in hemorrhagic shock scenarios. • Demonstrate consent documentation practices for emergent situations. • Perform safe transfusion administration in the field, including warming and monitoring. • Manage adverse reactions and coordinate follow-up with receiving hospitals.

Module 6: Managing Risk Through a Quality and Safety Framework

Overview	This module instills understanding of how EMS transfusion programs maintain quality and align with AABB standards.
Topics	• Quality System Essentials • Risk Mitigation • Continuous Improvement • Accreditation and Compliance
Learning objectives	• Apply AABB Quality System Essentials in EMS transfusion programs. • Identify and mitigate risks such as temperature excursions and incorrect product issue. • Report adverse events and near misses according to compliance standards. • Monitor program metrics and implement continuous improvement strategies.

Module 7: Collaboration and Communication

Overview	This module prepares EMS leaders to build and sustain strong partnerships.
Topics	• Building Partnerships • Communication and Joint Training • Expanding Networks • Sustaining Collaboration
Learning objectives	• Build partnerships with hospitals, blood centers, and trauma programs. • Facilitate joint training and simulation exercises for team readiness. • Establish feedback loops and shared dashboards for outcome tracking. • Sustain collaboration through MOUs, renewal processes, and success reporting.

Activities for Successful Completion of the Certificate Program

Complete the modules in order as information builds upon preceding lessons. Since this is a self-paced program, learners may decide how much time is needed to review and study the materials. It is estimated that it will take approximately 7 hours and 15 minutes to complete the program (this includes estimated time to view the learning modules, take assessments and complete the evaluation). A suggested strategy is to create a study plan or timeline for completing each module. Follow that plan to ensure timely completion within the year that you will have access to the program.

Assessments and Grading to Obtain Certificate

For successful completion of the program resulting in conferral of the AABB Prehospital Transfusion Program Certificate Program:

1. Read and carefully study each slide in each module.
2. After each module, complete the assessment and answer all questions, scoring 80% or higher. The assessment is a pass/fail exercise where learners will have three (3) opportunities to achieve 80% or higher. There is no grade provided for each assessment; rather, the assessment offers an opportunity to reinforce understanding of the content provided in the program.
3. Complete the Prehospital Transfusion Program Certificate Post-Program Evaluation (Certificate of Completion/continuing education credit issued).

On each assessment:

- Learners will receive questions (i.e., multiple choice) and be asked to select the correct answer.
- Learners will receive feedback as to whether an answer choice is correct or incorrect.

Program Access & Retakes

Access to the program in the AABB Education Platform will be available for one year from the date of registration for the program. Immediate access is granted upon registration. This program is self-paced; however, learners must complete all modules, assessments, and a program evaluation within the year to receive the Certificate of Completion.

If a learner fails any module assessments, he/she can request a retake form. The retake provides three additional attempts on any failed module assessment(s). It is recommended to complete all modules and module assessments before submitting a retake, as the retake will apply to any and all failed module assessments. To request a retake form, contact eLearning@aabb.org.

Program Content Accessibility

The program content is presented as a series of recorded modules. The volume may be adjusted using the volume controls on the video player and/or the learner's computer volume controls. Learners may pause, resume, rewind, or fast-forward the recordings as needed. For the best learning experience and understanding of the material, learners are encouraged to view the modules in their entirety and in the order presented. Learners may return to the modules for review as often as needed during the access period.

A transcript of the recording is available upon request for registered participants who are hearing impaired. To request a transcript, please contact eLearning@aabb.org.

Continuing Education Credits

Estimated Time to Complete

The estimated time to complete the AABB Prehospital Transfusion Certificate Program is approximately 7 hours and 15 minutes, which includes the time required to complete assessments and the program evaluation. A total of 5.75 continuing education credits will be awarded for the estimated time to complete all seven instructional modules.

To earn continuing education credit and the program certificate, participants must complete all required modules, achieve the required passing score on the assessments, and complete the program evaluation.

Joint Accreditation

In support of improving patient care, AABB is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.



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INTERPROFESSIONAL CONTINUING EDUCATION

Physicians

AABB designates this enduring material for a maximum of **5.75 AMA PRA Category 1 Credits™**, (*which does not include the time for assessments and evaluation*). Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Laboratory Professionals and ASCP Board of Certification Credential Maintenance Program

AABB will provide laboratory professionals who successfully complete the program with a certificate of participation documenting **5.75** hours of continuing education. Activities designated for ACCME credit or general credit issued by AABB are eligible for and can be self-reported to the American Society for Clinical Pathology Board of Certification Credential Maintenance Program (ASCP BOC CMP). Participants may apply the **5.75** hours toward their CMP requirements, subject to the requirements and point-allocation rules applicable to their individual credential.

For All Participants

Participants are responsible for determining whether this activity meets the continuing education requirements of their certification organization, licensing board, employer, or other authority.

Disclosure Declaration

It is the policy of the Association for the Advancement of Blood & Biotherapies to ensure independence, balance, objectivity, and scientific rigor and integrity in all of its CE activities. Faculty must disclose to the participants any relationships with commercial companies whose primary business is producing, marketing, selling, re-selling or distributing healthcare products used by or on patients. AABB has evaluated, identified, and mitigated any potential conflicts of interest through a rigorous content validation procedure, use of evidence-based data/research, and a multidisciplinary peer review process. The following information is for participant information only. It is not assumed that the presence of such relationships will have a negative impact on the presentations. Disclosures for the planners, program faculty, peer reviewers and AABB personnel can be viewed on the AABB website. All conflicts of interest have been mitigated.

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