



The CSTR Exam: How to Prepare & What to Expect

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After the completion of this presentation, participants will be able to answer the following questions:

- What is the CSTR credential?
- Am I eligible to take the CSTR exam?
- What does it cost to take the CSTR exam?
- How do I register to take the CSTR exam?
- What can I do to prepare for the CSTR exam?
- What can I expect to be on the CSTR exam?
- How can I maintain my CSTR credential?

The CSTR Credential

- Certified Specialist in Trauma Registries
 - A trauma registry and data expert
 - Credentialed through the Registrar Certifying Board of the American Trauma Society
 - Board certification in trauma registry is highly valued
 - Awarded to candidates who pass the CSTR Certification Exam
 - Credential must be re-certified every 4 years by continuing education or re-examination

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Eligibility

- Guidelines only!
- Not required, but highly recommended!
 - A bachelors degree (B.A., B.S., or equivalent)
 - At least 2-3 years of full-time or the equivalent (4,000 hours) experience in trauma registry practice.

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Fees

- \$275 ATS Members
- \$350 Non-Members

****These fees include a non-refundable administrative fee of \$50.00. ATS membership must be current to be eligible for the reduced fee.*

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The Application Process

- Must register on ATS Website
- Answer all “Required” questions
- You may leave “Optional” questions blank
- Enter payment information
- Electronically sign application
 - The name you enter on your Application must match exactly the name shown on your current government-issued photo ID
- Submit!

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Scheduling the Exam

- Expect a test eligibility letter within 2-4 weeks from the ATS
- Follow the instructions on this letter
 - Find a testing center as close to your location as possible
 - Locations can be found on the Comira website
 - Contact Comira to schedule your exam
- You only have **90 days** from the “Date of Authorization” to schedule **and** take the exam!

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Test Day!

- Take your **Eligibility to Test letter** to the exam center!!!
- Take valid government-issued photo ID
- Arrive at least 15 minutes early
- **Nothing** allowed in testing room!
 - Pencil and paper provided by proctor is allowed
- Test is **250** multiple choice questions
- You have **4** hours to complete the exam
- Results are provided immediately after submission of the exam

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Re-Examination

- You can sit for the exam times per year max
- A new application and fee is required for each re-examination
- Recommendation to wait at least 1 month between testing attempts

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Maintaining the CSTR Credential

- A minimum of 32 contact hours in the areas of (I) Data Management, (II) Conditions of Injuries, (III) Coding and Scoring Concepts, and (IV) Registry Issues
 - 4 years
 - Minimum of eight (8) CE's completed during the 12 months prior to recertification
 - Each successful completion of a college credit counts as 10 CE hours

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Maintaining the CSTR Credential

- Notification is provided 8 weeks prior to deadline instructing you to complete the recertification application
- ATS must receive application 30 days prior to your certification expiration date
- Fees
 - \$100 ATS Members
 - \$165 non-ATS member
- Audit possible
- more than 6 months past the certification expiration, must retake exam

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Content

- DATA MANAGEMENT 40%
- CONDITIONS OF INJURY 25%
- CODING AND SCORING CONCEPTS 30%
- REGISTRY ISSUES 5%

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Preparation

- ATS Trauma Registry Course
- ATS Online Practice Exam
 - \$65 ATS Members
 - \$85 non-ATS Members
- Study Guide
- Flash Cards
- Quizlet
- AIS Coding Guidelines
- **ICD-9** Coding Guidelines
- NTDS Data Dictionary
- The “Orange Book”
- Scores Packet (PTSF Website)
- Anatomy and Physiology

The Specifics – Data Management

- The definition of a “Trauma Patient” (Green Book and Orange Book)
- NTDB Patient Inclusion Criteria
 - Note that state can be different
 - Memorize ICD-9 Code Range
- Abstraction
 - Concurrent
 - Retrospective
 - Hybrid

The Specifics – Data Management Continued

- Reporting
 - Can you run a basic report?
 - What information do you need to run a report?
- Graphs
 - Bar
 - Pie
 - Line
 - Other
 - Control Charts, Dashboards, scattergrams, Pareto Chart

The Specifics – Data Management Continued

- Basic Performance Improvement Concepts
 - PIPS
 - Loop Closure
 - Benchmarking
- Statistics
 - Calculations
 - Mean, Median, Mode, etc.

The Specifics – Conditions of Injury

- ***ANATOMY AND PHYSIOLOGY***
 - Get Specific!
 - Bones
 - Muscles
 - Organs
 - Joints
 - Veins
 - Nerves (cranial)

The Specifics – Conditions of Injury Continued

- Testing
 - Radiology
 - X-Rays/Plain Films
 - Ultrasound
 - FAST
 - MRI
 - Others
 - Diagnostic Peritoneal Lavage (DPL), PET Scan
 - Interventional Radiography
 - Arteriography, Angiography

The Specifics – Conditions of Injury Continued

- Laboratory
 - Toxicology
 - Chemistry
 - Hematology
 - Arterial Blood Gases (ABG)
 - Urinalysis
- Interventions
 - Airway Management
 - Endotracheal tubes
 - Laryngeal Mask Airway (LMA)

The Specifics – Conditions of Injury Continued

- Fluid Administration
 - Crystalloids
 - Normal Saline, Lactated Ringers
 - Blood Products
 - PRBC, FFP, platelets
- More Anatomy!!
 - Specific types of injuries to various body regions
 - Procedures related to injuries in various body regions

The Specifics – Coding and Scoring Concepts

- ICD-9 or ICD-10?
 - E-codes
 - Location of Injury Codes
- Scoring Principles
 - AIS
 - GCS
 - Trauma Score
 - Revised Trauma Score (Triage and Evaluation)

The Specifics – Coding and Scoring Concepts

Continued

- Injury Severity Score
- New Injury Severity Score
- TRISS
- M Score
- Z Score
- W Score

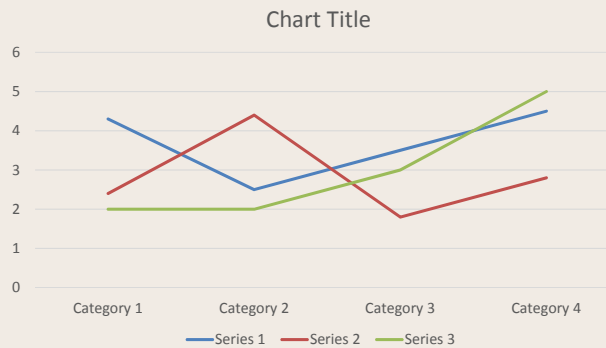
The Specifics – Registry Issues

- Data Validation
- Inter-Rater Reliability
- Confidentiality
- The Trauma Registrars Role
- Registry Operations

Example Question 1

The following is an example of what type of graph?

- a. Bar
- b. Line
- c. Dashboard
- d. Fishbone



Example Question 2

What spinal vertebrae is considered the Atlas?

- a. C1
- b. C2
- c. L1
- d. L2

Example Question 3

What bone is considered the heel bone?

- a. Talus
- b. Cuboid
- c. Calcaneus
- d. Navicular

Example Question 4

How many liters of blood are in the human body?

- a. 2
- b. 5
- c. 7
- d. 10

Example Question 5

Otorrhea is bleeding from what body structure?

- a. Eye
- b. Mouth
- c. Nose
- d. Ear

Example Question 6

Which cranial nerve is responsible for smell?

- a. I
- b. II
- c. III
- d. IV

Example Question 7

What is the ICD-9-CM location of injury code for a patient that is injured on the street or highway?

- a. E849.2
- b. E849.4
- c. E849.5
- d. E849.7

Example Question 8

What is the range of the Glasgow Coma Score (GCS)?

- a. 0-15
- b. 1-15
- c. 3-15
- d. 1-75

Example Question 9

What component does not compose part of the Trauma Score (TS)?

- a. GCS
- b. SBP
- c. Respiratory Effort
- d. Pupillary Response

Example Question 10

Which score is based on the ISS compared to the Major Trauma Outcome Study (MTOS)?

- a. M
- b. Z
- c. W
- d. TRISS

Important Links!

- American Trauma Society CSTR Webpage
 - <http://www.amtrauma.org/?page=CSTR>
 - Registration
 - General Information
 - Handbook
- CSTR Practice Exam
 - <http://www.amtrauma.org/?page=CSTRPractice>

Thank You!



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