

MedEdPrep & GTC Insights: **EMS Training Across Georgia**

MedEdPrep has partnered with the Georgia Trauma Commission to support EMS education statewide. This is a snapshot of statewide and regional trends as measured through MedEdPrep analytics.

Data presented is from:

- 31 Schools
- All 10 EMS Regions
- 70,000+ Questions Seen
- 300+ Topics
- 1.800+ Communication Points
- 60+ Hours Supplemental Support

- 6 Months
- 6 Standard Exams

- 479 Students
- - 1,000+ Total Exams Taken 385,000+ Data Points

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High-Level Insights

- Longer Programs → Better Performance on Technical Content
- Program Length ≠ Difference on Foundational Content & Scenarios
- Regional Variations exist

Length of Programs vs Students Onboarded



Technical Exam Scores vs Length of Programs



Email Interactions with MedEdPrep & Associated Agencies

Region	Sent	Received	Response %	Region	Sent	Received	Response %	Region	Sent	Received	Response %
Region 1	45	6	13%	Region 5	55	8	15%	Region 9	99	19	19%
Region 2	80	21	26%	Region 6	58	0	0%	Region 10	93	40	43%
Region 3	392	94	24%	Region 7	41	13	32%	GEMSA	250	17	7%
Region 4	15	5	33%	Region 8	69	11	16%	GTC	529	125	24%



Detailed Insights

Concepts that are consistently Red, Orange, and Gray in the chart below:

- Bleeding & Trauma Management
- Chest & Abdominal Trauma
- Mass Casualty & Explosions
- Injuries & Illnesses of the Brain
- Chest Pain & Cardiac Events
 Adult & Pediatric Airway Management
- Neonatal Care & Pregnancy
- Drug Interactions & Dosing

Regional Variances of Concept Difficulty



Student Performance vs. Program Length

Of the 435 Questions:

- 78.4% Work Well Statewide
- 18.9% Perform poorly Statewide
- 2.8% High Regional Variation

Leveraging The Data For Better Outcomes

- Refine exams for clarity and curriculum alignment
- Compare performance data with NREMT pass rates
- Identify and address instructional gaps
- Intervene before certification testing
- Implement improved assessments for future cohorts



Moving Forward

As a Georgia-based organization, MedEdPrep shares the Commission's commitment to advancing trauma care statewide through data collection and research. Together with the University of Illinois, we're tackling EMS education and literacy challenges, ensuring communities will have both competent and confident providers. By turning statewide data into actionable insights, our goal is to allow the GTC to optimize resources, enhance training, and improve patient outcomes—keeping Georgia safer and healthier than we were yesterday.



Question Analysis and Implications

Each exam question provides insights into student comprehension of specific learning objectives. Our framework includes 500+ points, all measured individually across Georgia's EMS education programs.

Volume of Sub Topic Exposure b	y Exam with Performance
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Category	Correct	Attempted	Performance
Operations	40,505	46,047	87.96%
Final Exit	82,981	103,846	79.91%
• Airway and Respiratory	34,292	47,095	72.81%
Special Populations	28,830	40,297	71.54%
• Trauma	41,732	60,043	69.5%
Medical	56,479	88,137	64.08%
Grand Total	284,819	385,465	73.89%

Bottom 10 Topics		• Top 10 Topics			
1. Multi-System Trauma			1. Abuse and Neglect		
926 correct	4152 exp	22.3%	769 correct	775 exp	99.2 %
2. Tracheobronchial disruption	4152	exposures	2. Hypersensitivity	775	exposures
102 correct	390 exp	26.1%	844 correct	852 exp	99.1%
3. Circulatory assist devices	390	exposures	3. Mandatory reporting	852	exposures
110 correct	370 exp	29.7 %	803 correct	811 exp	99.0%
4. Hepatitis	370	exposures	4. Vaccinations	811	exposures
486 correct	1272 exp	38.2%	185 correct	187 exp	98.9%
5. Diaphragmatic rupture	1272	exposures	5. Vascular injury	18/	exposures
282 correct	684 exp	41.2%	253 correct	257 exp	98.4%
6. Clotting disorders	684	exposures	6. Sensory deficit/loss	257	' exposures
261 correct	633 exp	41.2%	366 correct	372 exp	98.4%
7. Hypertensive emergencies	633	exposures	7. Vaginal foreign body	372	exposures
1495 correct	3597 exp	41.6%	362 correct	368 exp	98.4%
8. Alcohol intoxication and withdrawal	3597	exposures	8. Operating Emergency Vehicles	368	exposures
264 correct	633 exp	41.7%	1245 correct	1267 exp	98.3%
9. Liver and Biliary Tract Disorders	633	exposures	9. Evidence preservation	1267	exposures
933 correct	2114 exp	44.1%	219 correct	223 exp	98.2 %
10. Other Gastrointestinal Disorders	2114	exposures	10. Genital Injuries	223	exposures
"Nib correct	2053 exp	44.6%	724 correct	738 exp	98.1%
STO GATLER	2053	exposures		738	exposures

Analysis Summary:

- 385,000+ data points collected over 6 months
- Final Exit Exam focuses on scenario-based clinical decision-making
 Critical finding:
- Students often lack understanding of WHY certain interventions are performed
- Students excel at knowing WHAT actions to take in patient scenarios

Key Insights from Topic Analysis:

- The Hi & Lo performing topics reveal consistency across all regions
- Hi-performing areas (95-99% correct) include operational skills.
- Lo-performing areas (22-44% correct) involve complex pathophysiology.

This data suggests:

Students have mastered procedural skills but struggle with underlying science.

We may need to start putting a higher emphasis on the underlying concepts and pathophysiology, and it may lead to a higher success rate on the NREMT certification exams.