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5 **Tables:**
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8 **Supplemental Table for online publication.** Patient scenarios randomly provided to on-duty EMS
9 providers for GCS scoring, with the correct component and composite scores for each.
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		Eye	Verbal	Motor	Total
MILD TBI					
1	You respond to the scene of a 50 year-old man who was injured in a bicycle accident. A car pulled in front of him, forcing him off the road, and he fell in a grassy median. He is sitting up inspecting his helmet and is only complaining of road rash to his arms and legs. He is giving the police a description of the car involved and limps to the ambulance to have his wounds dressed.	4	5	6	15
2	You respond to an 18 year-old man involved in a single-car MVC where he struck a tree. There is moderate damage to the car, and he is sitting on the curb. When you ask him the date, he has slurred speech and states “December 12, 2002” (it is actually February 14, 2013). When you ask him to show you two fingers, he giggles and flips you off with both hands. You note a strong odor of alcohol on his breath and possible track-marks on his arms.	4	4	6	14
3	You respond to a 28 year-old woman struck in the head by a canoe oar. She was pulled from the river by bystanders who state she was unconscious. She was wearing a life-jacket. She awakens when you ask “are you okay,” and asks “What happened?” over and over again. She shows you two fingers on each hand when you ask her to do so.	3	4	6	13
MODERATE TBI					
4	You respond to a 16 year-old woman who was a pedestrian struck by a car and find her laying in the street. She has a boggy hematoma to the right side of her scalp and abrasions to her arms and legs. Her pupils are equal, round, and reactive to light. She opens her eyes when you call her name but she is confused. She knows her name and the year, but not the date or month. When you ask her to show you two fingers, she looks confused and does nothing. When you attempt an IV in her right arm, she quickly pulls away, swats at you with her left hand, and says “Stop it!”	3	4	5	12
5	You respond to a 24 year-old male assault victim who was struck in the side of his head with a baseball bat during a bar fight. You find him breathing but unconscious. When you perform a sternal rub, he	2	4	4	10

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5 opens his eyes and tries to pull away, and stops when you stop
6 stimulating him. When you constantly sternally rub him, he will talk
7 to you and thinks the year is 1963 when asked (it is 2013).
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10 You respond to a call for a “man down” by the railroad tracks and
11 find a disheveled 45 year-old man face down and parallel to the
12 tracks. As you approach, he is moaning but you cannot understand
13 what he is trying to say. He will not answer questions or follow
14 6 commands. His breathing is normal, he is covered in blood, and has 2 2 5 9
15 obvious deformities to his right arm and leg. When you apply a
16 sternal rub, he reaches for your hand and briefly opens his eyes; his
17 pupils are equal.
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21 **SEVERE TBI**
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23 You respond to a 22 year-old woman who was pushed down the stairs
24 during a fight with her boyfriend. She fell down 12 wooden steps and
25 landed on the cement basement floor. She is bleeding from the nose
26 and mouth and has an obvious deformity to her left wrist. She will
27 7 briefly open her eyes to a sternal rub, and her pupils are normal-size 2 2 4 8
28 and sluggishly reactive to light. She tries to pull away when you pinch
29 her shoulder and mumbles something you cannot understand, but
30 settles when you stop applying stimulation.
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34 You respond to a motorcycle accident where an un-helmeted rider hit
35 a car that unexpectedly pulled out of a parking lot. He is found laying
36 supine in the road 20-feet from the site of impact. Initially, you notice
37 that he has irregular, snoring respirations and has obvious trauma to
38 8 his head, face, and right leg. He is unresponsive, and does not open 1 1 3 5
39 his eyes to a deep sternal rub. You can pull his eyelids open and
40 discover that his left pupil is 2mm larger than his right. Other than
41 noisy respirations, he makes no sounds at any time. When you apply a
42 sternal rub, his arms pull into his chest and his legs straighten out.
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47 You respond to an 18 year-old man who fell out of a tree and landed
48 on his head. He is briskly bleeding from his scalp but has no other
49 obvious injuries. His only response to a deep sternal rub is to moan
50 9 and groan. On your secondary exam, you find that his pupils are 1 2 1 4
51 equal, dilated, and sluggishly reactive to light. There are several
52 empty beer bottles at the base of the tree, and there is a strong odor of
53 alcohol on his breath.
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