



**BOSTON ASSESSMENT OF TBI-LIFETIME  
BAT-L, CIVILIAN VERSION**

**VA BOSTON HEALTHCARE SYSTEM**

**THIS RESEARCH WAS SUPPORTED BY THE  
TRANSLATIONAL RESEARCH CENTER FOR TBI AND STRESS DISORDERS (TRACTS)  
A VA REHABILITATION RESEARCH AND DEVELOPMENT TRAUMATIC BRAIN INJURY  
CENTER OF EXCELLENCE (B6796-C).**

## BAT-L, Civilian

The Boston Assessment of Traumatic Brain Injury-Lifetime (BAT-L, Civilian Version) was designed to capture head injuries incurred across the lifespan and to be used as a companion instrument with the BAT-L Military Version. The emphasis of this semi-structured interview is to obtain a detailed account of the injury including the context and events occurring before, during, and after the injury in civilian experiences.

## Administration

The BAT-L is designed to be used by doctoral level neuropsychologists or other comparably trained professionals (e.g., neuropsychology graduate students, fellows or clinical psychologists with supervision of a licensed neuropsychologist) and was validated as a consensus diagnostic instrument (Fortier et al., In Press). It was created for use in a research setting where detailed information regarding TBI incidence and severity is necessary. The instrument guides the examiner in gathering necessary information from veterans and service members about the three worst TBIs. Information is reviewed by a TBI diagnostic consensus team consisting of at least three doctoral-level psychologists, including at least one neuropsychologist. The consensus approach is integral to the instrument. If used without a consensus team, review of selected cases is suggested to assure a consistent diagnostic approach. It may be used both independently as well as part of a larger clinical interview. Please contact the TRACTS team for consultation and training requests.

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**BAT-L hybrid classification system for the diagnosis of mTBI into mild Grade I, II, and III injuries (adapted from Bailes and Cantu, 2001) and VA and DoD consensus criteria for TBI severity as defined in the *Clinical practice guidelines: management of concussion—mild traumatic brain injury (mTBI)*. (DOD, 2009).**

Criteria	Mild			Moderate	Severe
	Grade I	Grade II	Grade III		
Loss of Consciousness	None	< 5 minutes	> 5 minutes and < 30 minutes	> 30 minutes and < 24 hours	> 24 hours
Alteration of Mental Status	0 – 15 minutes	> 15 minutes and < 24 hours	> 24 hours	> 24 hours; severity based on other criteria	
Post Traumatic Amnesia	0 – 15 minutes	> 15 minutes and < 24 hours	> 24 hours	> 1 day and < 7 days	> 7 days
Glascow Coma Scale	13 - 15			9 - 12	< 9

Department of Veterans Affairs and Department of Defense. (2009). VA/DOD clinical practice guideline for the management of concussion/mild traumatic brain injury. Retrieved from [http://www.healthquality.va.gov/mtbi/concussion\\_mtbi\\_full\\_1\\_0.pdf](http://www.healthquality.va.gov/mtbi/concussion_mtbi_full_1_0.pdf).

**BAT-L CIVILIAN SUMMARY SCORE SHEET**

<b>Total # TBIs:</b>		
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**1<sup>st</sup> Most Severe**

<b>Age</b>	
<b>AMS</b>	hr / min / sec
<b>PTA</b>	hr / min / sec
<b>LOC</b>	hr / min / sec

**Severity**      *If Mild:*

<input type="checkbox"/> Mild	<input type="checkbox"/> Stage I
<input type="checkbox"/> Moderate	<input type="checkbox"/> Stage II
<input type="checkbox"/> Severe	<input type="checkbox"/> Stage III

**BATL Score (0 – 5)**

**Nature of Injury**

<input type="checkbox"/> MVA	<input type="checkbox"/> Physical Assault
<input type="checkbox"/> Fall	<input type="checkbox"/> Penetrating Injury
<input type="checkbox"/> Sports-Related	<input type="checkbox"/> Other: _____

**2<sup>nd</sup> Most Severe**

<b>Age</b>	
<b>AMS</b>	hr / min / sec
<b>PTA</b>	hr / min / sec
<b>LOC</b>	hr / min / sec

**Severity**      *If Mild:*

<input type="checkbox"/> Mild	<input type="checkbox"/> Stage I
<input type="checkbox"/> Moderate	<input type="checkbox"/> Stage II
<input type="checkbox"/> Severe	<input type="checkbox"/> Stage III

**BATL Score (0 – 5)**

**Nature of Injury**

<input type="checkbox"/> MVA	<input type="checkbox"/> Physical Assault
<input type="checkbox"/> Fall	<input type="checkbox"/> Penetrating Injury
<input type="checkbox"/> Sports-Related	<input type="checkbox"/> Other: _____

**3<sup>rd</sup> Most Severe**

<b>Age</b>	
<b>AMS</b>	hr / min / sec
<b>PTA</b>	hr / min / sec
<b>LOC</b>	hr / min / sec

**Severity**      *If Mild:*

<input type="checkbox"/> Mild	<input type="checkbox"/> Stage I
<input type="checkbox"/> Moderate	<input type="checkbox"/> Stage II
<input type="checkbox"/> Severe	<input type="checkbox"/> Stage III

**BATL Score (0 – 5)**

**Nature of Injury**

<input type="checkbox"/> MVA	<input type="checkbox"/> Physical Assault
<input type="checkbox"/> Fall	<input type="checkbox"/> Penetrating Injury
<input type="checkbox"/> Sports-Related	<input type="checkbox"/> Other: _____

<b>BAT-L Score (0 – 5):</b>	<b>BAT-L Lifetime Total Score</b>
0 = no TBI 1 = mTBI grade I 2 = mTBI grade II 3 = mTBI grade III 4 = moderate TBI 5 = severe TBI	<b>BAT-L TOTAL LIFETIME SCORE TOTAL</b>
<b>BAT-L Total Score = Sum of the scores for the three worst TBIs (BAT-L Total Score: Range = 0 - 15).</b>	

**Total Estimated Repetitive Blunt Exposures:** \_\_\_\_\_

## CIVILIAN-RELATED HEAD INJURIES

During this interview I will be asking you about any blows to the head that may have occurred to you during your life.

### CIVILIAN:

**Have you experienced blows to the head at any time in your life? (Patient report, you will evaluate below)**  
**Refer to BATL-Q for endorsed events.**

Uncertain

No

*If no, query further losses of consciousness or PTA, then discontinue questionnaire if none.*

Yes

*If yes, What was the cause of the injury?*

MVA: # Occurrences: \_\_\_\_\_

Fall: # Occurrences: \_\_\_\_\_

Sports-related injury: # Occurrences: \_\_\_\_\_

Physical assault: # Occurrences: \_\_\_\_\_

Penetrating injury: Type: \_\_\_\_\_ # Occurrences: \_\_\_\_\_

Other: Type: \_\_\_\_\_ # Occurrences: \_\_\_\_\_

**Total Civilian (estimate to inform inquiry below):** \_\_\_\_\_

Next, I am going to ask you about the [number 1 – 3] worst or most severe head injuries you experienced.

### CIVILIAN #1 (Most Severe):

**Age (or best estimate) at time of occurrence:** \_\_\_\_\_

1. What type of accident was it?

MVA

Physical assault

Fall

Penetrating injury

Sports-related injury

Other: \_\_\_\_\_

2. Do you remember the event itself? *If yes*, Can you describe it to me? If you don't remember, can you tell me what other people said happened?

a. Were others seriously injured?

Uncertain

No

Yes

b. What is the last thing you can remember just before the event?

- c. What is the first thing you can remember just after the event? *Following pt's response ask, How long do you think that was after the event?*
- d. Did you experience any changes in your vision or hearing after the event? *Establish that the pt is not reporting mental status change when was in fact hearing/vision change.*
- e. Did you experience confusion or disorientation (not sure where you were, what day or time it was, perform simple math calculations/multistep commands, perform activities as expected) after the event? If so, for how long? *With this and the following question, try to determine if the pt experienced an actual change in mental status vs. vision/hearing difficulty associated with the blast/accident and the chaos surrounding the event.*
- f. Did you experience a loss of consciousness at the time of the blast/accident (were you 'knocked out')? If so, for how long? If yes, was LOC witnessed (were you told by others you were knocked out/unconscious)? *Probe to ensure LOC is not due to anoxia/alcohol/substance overdose.*
- g. Did you experience any of the following immediately after the event? *Note Sx duration.*
- |  |                        |
|--|------------------------|
| <input type="checkbox"/> Headaches   | <i>Duration: _____</i> |
| <input type="checkbox"/> Trouble thinking  | <i>Duration: _____</i> |
| <input type="checkbox"/> Nausea  | <i>Duration: _____</i> |
| <input type="checkbox"/> Dizziness   | <i>Duration: _____</i> |
| <input type="checkbox"/> Fatigue   | <i>Duration: _____</i> |
| <input type="checkbox"/> Poor coordination, balance problems, or slowed reaction times | <i>Duration: _____</i> |
| <input type="checkbox"/> Sensory changes (Hearing/Vision/Taste/Smell)                  | <i>Duration: _____</i> |
| <input type="checkbox"/> Numbness or tingling  | <i>Duration: _____</i> |
| <input type="checkbox"/> Mood changes (Anxiety/Depression/Irritability)                | <i>Duration: _____</i> |
| <input type="checkbox"/> Sleep trouble   | <i>Duration: _____</i> |
| <input type="checkbox"/> Other: _____  | <i>Duration: _____</i> |

3. After the injury did you see a physician, trainer, or other trained personnel?

- Uncertain
- No
- Yes

4. After the injury were you restricted from school, work, or physical exertion?

- Uncertain
- No
- Yes

**If Yes:**

For how long were you away from work/school/duties? \_\_\_\_\_

Did you return to work/school/duties? \_\_\_\_\_

Did this event lead to medical leave of absence? \_\_\_\_\_

**EVALUATE CIVILIAN #1:**

**Using the questions above, or in spontaneous dialogue, evaluate the following:**

**Alteration of mental status:**

- NO
- YES

If yes, enter the estimated duration of the AMS? \_\_\_\_\_ hr / min / sec

\*AMS = AMS + PTA + LOC

**PTA:**

- NO
- YES

If yes, enter the estimated duration of the PTA? \_\_\_\_\_ hr / min / sec

\*PTA = PTA + LOC

**LOC:**

- NO
- YES

If yes, enter the estimated duration of the LOC? \_\_\_\_\_ hr / min / sec

**Substance Related:**

- NO
- YES

**Does the patient actually recall this information themselves? (e.g., can provide specific information regarding what they were doing when injury occurred, etc., or was knowledge gained from the reports of witnesses?)**

- Uncertain
- No
- Yes

**Emotional Context of Injury:**

- Traumatic
- Non-traumatic

**CIVILIAN #2 (Second Most Severe):**

**Age (or best estimate) at time of occurrence:** \_\_\_\_\_

1. What type of accident was it?

- MVA                       Physical assault  
 Fall                         Penetrating injury  
 Sports-related injury    Other: \_\_\_\_\_

2. Do you remember the event itself? **If yes**, Can you describe it to me? If you don't remember, can you tell me what other people said happened?

a. Were others seriously injured?

- Uncertain     No     Yes

b. What is the last thing you can remember just before the event?

c. What is the first thing you can remember just after the event? *Following pt's response ask, How long do you think that was after the event?*

d. Did you experience any changes in your vision or hearing after the event? *Establish that the pt is not reporting mental status change when was in fact hearing/vision change.*

e. Did you experience confusion or disorientation (not sure where you were, what day or time it was, perform simple math calculations/multistep commands, perform activities as expected) after the event? If so, for how long? *With this and the following question, try to determine if the pt experienced an actual change in mental status vs. vision/hearing difficulty associated with the blast/accident and the chaos surrounding the event.*

f. Did you experience a loss of consciousness at the time of the blast/accident (were you 'knocked out')? If so, for how long? If yes, was LOC witnessed (were you told by others you were knocked out/unconscious)? *Probe to ensure LOC is not due to anoxia/alcohol/substance overdose.*

g. Did you experience any of the following immediately after the event? *Note Sx duration.*

- Headaches Duration: \_\_\_\_\_
- Trouble thinking Duration: \_\_\_\_\_
- Nausea Duration: \_\_\_\_\_
- Dizziness Duration: \_\_\_\_\_
- Fatigue Duration: \_\_\_\_\_
- Poor coordination, balance problems, or slowed reaction times Duration: \_\_\_\_\_
- Sensory changes (Hearing/Vision/Taste/Smell) Duration: \_\_\_\_\_
- Numbness or tingling Duration: \_\_\_\_\_
- Mood changes (Anxiety/Depression/Irritability) Duration: \_\_\_\_\_
- Sleep trouble Duration: \_\_\_\_\_
- Other: \_\_\_\_\_ Duration: \_\_\_\_\_

3. After the injury did you see a physician, trainer, or other trained personnel?

- Uncertain
- No
- Yes

4. After the injury were you restricted from school, work, or physical exertion?

- Uncertain
- No
- Yes

**If Yes:**

*For how long were you away from work/school/duties?* \_\_\_\_\_

*Did you return to work/school/duties?* \_\_\_\_\_

*Did this event lead to medical leave of absence?* \_\_\_\_\_

**EVALUATE CIVILIAN #2:**

**Using the questions above, or in spontaneous dialogue, evaluate the following:**

**Alteration of mental status:**

- NO  YES

*If yes, enter the estimated duration of the AMS? \_\_\_\_\_ hr / min / sec*

**\*AMS = AMS + PTA + LOC**

**PTA:**

- NO  YES

*If yes, enter the estimated duration of the PTA? \_\_\_\_\_ hr / min / sec*

**\*PTA = PTA + LOC**

**LOC:**

- NO  YES

*If yes, enter the estimated duration of the LOC? \_\_\_\_\_ hr / min / sec*

**Substance Related:**

- NO
- YES

**Does the patient actually recall this information themselves? (e.g., can provide specific information regarding what they were doing when injury occurred, etc., or was knowledge gained from the reports of witnesses?)**

- Uncertain
- No
- Yes

**Emotional Context of Injury:**

- Traumatic
- Non-traumatic

**CIVILIAN #3 (Third Most Severe):**

**Age (or best estimate) at time of occurrence:** \_\_\_\_\_

1. What type of accident was it?

- MVA                       Physical assault  
 Fall                         Penetrating injury  
 Sports-related injury    Other: \_\_\_\_\_

2. Do you remember the event itself? **If yes**, Can you describe it to me? If you don't remember, can you tell me what other people said happened?

a. Were others seriously injured?

- Uncertain     No     Yes

b. What is the last thing you can remember just before the event?

c. What is the first thing you can remember just after the event? *Following pt's response ask, How long do you think that was after the event?*

d. Did you experience any changes in your vision or hearing after the event? *Establish that the pt is not reporting mental status change when was in fact hearing/vision change.*

e. Did you experience confusion or disorientation (not sure where you were, what day or time it was, perform simple math calculations/multistep commands, perform activities as expected) after the event? If so, for how long? *With this and the following question, try to determine if the pt experienced an actual change in mental status vs. vision/hearing difficulty associated with the blast/accident and the chaos surrounding the event.*

f. Did you experience a loss of consciousness at the time of the blast/accident (were you 'knocked out')? If so, for how long? If yes, was LOC witnessed (were you told by others you were knocked out/unconscious)? *Probe to ensure LOC is not due to anoxia/alcohol/substance overdose.*

g. Did you experience any of the following immediately after the event? *Note Sx duration.*

- Headaches Duration: \_\_\_\_\_
- Trouble thinking Duration: \_\_\_\_\_
- Nausea Duration: \_\_\_\_\_
- Dizziness Duration: \_\_\_\_\_
- Fatigue Duration: \_\_\_\_\_
- Poor coordination, balance problems, or slowed reaction times Duration: \_\_\_\_\_
- Sensory changes (Hearing/Vision/Taste/Smell) Duration: \_\_\_\_\_
- Numbness or tingling Duration: \_\_\_\_\_
- Mood changes (Anxiety/Depression/Irritability) Duration: \_\_\_\_\_
- Sleep trouble Duration: \_\_\_\_\_
- Other: \_\_\_\_\_ Duration: \_\_\_\_\_

3. After the injury did you see a physician, trainer, or other trained personnel?

- Uncertain
- No
- Yes

4. After the injury were you restricted from school, work, or physical exertion?

- Uncertain
- No
- Yes

**If Yes:**

*For how long were you away from work/school/duties? \_\_\_\_\_*

*Did you return to work/school/duties? \_\_\_\_\_*

*Did this event lead to medical leave of absence? \_\_\_\_\_*

**EVALUATE CIVILIAN #3:**

**Using the questions above, or in spontaneous dialogue, evaluate the following:**

**Alteration of mental status:**

- NO  YES

*If yes, enter the estimated duration of the AMS? \_\_\_\_\_ hr / min / sec*

**\*AMS = AMS + PTA + LOC**

**PTA:**

- NO  YES

*If yes, enter the estimated duration of the PTA? \_\_\_\_\_ hr / min / sec*

**\*PTA = PTA + LOC**

**LOC:**

- NO  YES

*If yes, enter the estimated duration of the LOC? \_\_\_\_\_ hr / min / sec*

**Substance Related:**

- NO
- YES

**Emotional Context of Injury:**

- Traumatic
- Non-traumatic

**Does the patient actually recall this information themselves? (e.g., can provide specific information regarding what they were doing when injury occurred, etc., or was knowledge gained from the reports of witnesses?)**

- Uncertain
- No
- Yes

**BLUNT FINAL QUERY:**

**Is there anything else related to your life events that we haven't already talked about that exposed you to a high rate of repetitive blows to the head? (Regardless of presence or absence of acute AMS/PTA/LOC)**

Uncertain

No

*If no, query specific causes listed below.*

Yes

*If yes, What was the cause of the injury?*

Sports-related (football, hockey, martial arts, boxing, roller-blading, biking, skateboarding, etc): # Occurrences: \_\_\_\_\_

Jumps: # Occurrences: \_\_\_\_\_

Combatives of any type: # Occurrences: \_\_\_\_\_

Assaults or Domestic Violence: # Occurrences: \_\_\_\_\_

Other: Type: \_\_\_\_\_ # Occurrences: \_\_\_\_\_

**Total Repetitive Blows:** \_\_\_\_\_

*\*If acute symptoms are reported, assess further following format for TBI Injuries in the preceding sections.*