

TACTICAL MACE (T-MACE) WORKSHEET

Evaluate For Potentially Concussive Events:

- Involvement in a vehicle blast event, collision, or rollover
- Presence within 50 meters of a blast (inside or outside)
- A direct blow to the head or witnessed loss of consciousness
- Exposure to more than one blast event (the Service member's commander shall direct a medical examination)

Yes → **Abbreviated Neurological Exam** | No → **Stop the T-MACE exam**

Abbreviated Neurological Exam

GCS Test:		
Eye Opening	Verbal Response	Motor Response
4 - Spontaneous	5 - Oriented	6 - Obeys commands
3 - To verbal command	4 - Confused	5 - Localizes to painful stimuli
2 - To painful stimuli	3 - Inappropriate words	4 - Withdraws from pain
1 - No response	2 - Incomprehensible sounds	3 - Flexion to pain
	1 - No response	2 - Extension to pain
		1 - No response
Total Score: _____		

Additional Neuro Assessment

- Pupil: Equal, Round, Reactive, to Light/Accommodation (PERRLA)
- Push and pull against the upper and lower extremities and note any differences in resistance.

GCS 13-15 and no focal neurological deficit → Assess for TBI Red Flags | GCS 3-12 or focal neurological deficit → **Stop the T-MACE exam**

Assess for TBI Red Flags:

- Deteriorating level of consciousness
- Suspected skull fracture (e.g., raccoon eyes, battle's sign, otorrhea)
- Combativeness or agitated behavior
- Seizure activity
- Focal neurologic deficits such as pupil asymmetry, facial weakness/ asymmetry, weakness or paralysis of one side compared to the other
- Two or more episodes of vomiting
- Double vision or loss of vision
- Severe or worsening headache
- Concerning clinical presentations not listed above

Stop the T-MACE exam

Consult higher level of care for urgent intervention and evacuation using Tactical Combat Casualty Care (TCCC) protocols.

Document on a DD Form 1380 TCCC Casualty Care

*Refer to JTS TBI Management in PFC and consider neuro checks q1-2 hours while awaiting en route care.

Was there an external force?

- Blow or jolt to the head
- Object strike to the head
- Feeling of blast wave
- Acceleration deceleration of the head
- Other

Was there any of the following?

- Alteration of consciousness (AOC)
- Loss of consciousness (LOC)
- Post-traumatic amnesia (PTA)

Stop the T-MACE exam

- Initiate mandatory 24-hour rest period (Commanders may determine that mission requirements supersede this)
- Provide instruction on when to seek immediate medical attention¹
- Instruct SM to follow up in 24-hours for re-evaluation

- Notify command leadership and medical authority of findings
- Manage any acute headaches²
- Initiate 24-hour rest period
- Provide instruction on when to seek immediate medical attention¹
- Document positive concussion screen
- Consider performing repeat Abbreviated Neuro Exam and assess for TBI Red Flags every 12 hours
- Follow-up in 24 hours for re-evaluation and initiation of PRA IAW operational allowances
- When no longer in Prolonged Casualty Care and casualty has been evacuated to an appropriate Role 2 facility, continue with page 5 of MACE 2 exam to substantiate concussion diagnosis and detect impaired areas for targeted treatment

1. When to seek immediate medical attention

<ul style="list-style-type: none"> <input type="checkbox"/> Worsening headache <input type="checkbox"/> Slurred speech or difficulty speaking <input type="checkbox"/> Unsteadiness on feet <input type="checkbox"/> Seizures <input type="checkbox"/> Double or blurred vision <input type="checkbox"/> Weakness or numbness in any part of the body 	<ul style="list-style-type: none"> <input type="checkbox"/> Disorientation (not knowing where you are, difficulty recognizing people or places) <input type="checkbox"/> Any unusual behavior (e.g., increased aggression, anger, irritability, or crying) <input type="checkbox"/> Repeated vomiting <input type="checkbox"/> Decreasing levels of alertness <input type="checkbox"/> Something "just isn't right"
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2. Manage Acute Headaches

- Use acetaminophen every 6 hours followed by NSAIDS.
- Delay use of NSAIDS for 48 hours after concussion.
- Avoid use of any other analgesics (than noted above) unless directed by higher medical authority.

TACTICAL MILITARY ACUTE CONCUSSION EVALUATION (T-MACE) EXAM

TASK: Perform a Tactical Military Acute Concussion Evaluation (T-MACE) exam

CONDITION: Given a Prolonged Casualty Care scenario where you manage a casualty with a suspected head injury

STANDARD: Perform all steps in the T-MACE exam, score, and record results, and report findings to higher medical authority IAW service-specific standards once exam is complete

EQUIPMENT: T-MACE Worksheet, light source, DD Form 1380 TCCC Casualty Care card, writing utensil

PERFORMANCE STEPS: step-by-step instructions

1. Gather, inspect, and prepare equipment, including the T-MACE Worksheet.

2. Assess for a Potentially Concussive Event (PCE).

NOTE: Refer to the T-MACE worksheet for a list of PCE criteria.

3. Perform an Abbreviated Neurologic Exam:

(a) Assess and document the casualty's Glasgow Coma Score (GCS):

a. Eye-opening response

b. Verbal response

c. Motor response

(b) Assess and document additional neuro assessment.

a. Pupil assessment

b. Extremity motor assessment

NOTE: Refer to the T-MACE Worksheet as reference.

4. Calculate the total GCS Score and assess for focal neurological deficit:

(a) If the GCS score is between 3-12 or focal neurological deficit is noted, STOP the T-MACE evaluation, and immediately consult higher medical authority.

(b) If the GCS score is ≥ 13 AND no focal neurological deficit, continue with the T-MACE evaluation.

NOTE: Refer to the T-MACE Worksheet as reference.

5. Document the findings of the Abbreviated Neurological Exam on the DD Form 1380 TCCC Casualty Card.

6. Assess for Red Flags:

(a) If ANY Red Flags are present, STOP the T-MACE evaluation, and immediately consult higher medical authority, and document the Red Flags on the DD Form 1380 TCCC Casualty Card.

(b) If no red flags present, continue with the T-MACE exam.

NOTE: Refer to the T-MACE worksheet for a list of Red Flags.

7. Assess for the presence of external force.

(a) If no external force is noted:

- **STOP** the T-MACE exam evaluation.
- Initiate a mandatory 24-hour rest period. (Commander discretion and mission requirements may supersede 24-hour rest period).
- Provide instructions on when to seek immediate medical attention IAW Step 16.
- Provide instructions to the casualty to follow up in 24 hours for re-evaluation.
- Document findings on the DD Form 1380 TCCC Casualty Card.

(b) If external force is noted, continue with the T-MACE exam.

NOTE: Refer to the T-MACE worksheet for examples of external force.

8. Document the type of external force on the DD Form 1380 TCCC Casualty Card.

9. Assess for alteration of consciousness:

NOTE: Refer to the T-MACE worksheet for examples of alterations of consciousness.

10. Determine the findings of the assessment of consciousness.

(a) If no positive findings are noted:

- **STOP** the T-MACE exam evaluation.
- Initiate a mandatory 24-hour rest period. (Commander discretion and mission requirements may supersede 24-hour rest period)
- Provide instructions on when to seek immediate medical attention IAW Step 16.
- Provide instructions to the casualty to follow up in 24 hours for re-evaluation.
- Document all findings and treatments on a DD Form 1380 TCCC Casualty Card.

(b) If any positive finding is noted, continue with the T-MACE exam.

11. Document consciousness assessment findings and actions on the DD Form 1380 TCCC Casualty Card.

12. Notify command leadership and medical authority of consciousness assessment findings.

13. Manage any acute headaches.

NOTE: Refer to the T-MACE worksheet for acute headache management.

CAUTION: Reassess and treat all interventions.

14. Document the presence of headache and any acute headache treatments on the DD Form 1380 TCCC Casualty Card.

15. Initiate 24-hour rest period.

NOTE: Commander discretion and mission requirements may supersede 24-hour rest period.

16. Instruct the casualty on when to seek immediate medical attention.

NOTE: Refer to the T-MACE worksheet for indications of when to seek immediate medical attention.

17. Document positive concussion screens on the DD Form 1380 TCCC Casualty Card.

18. Follow-up in 24-hours for re-evaluation and initiation of Progressive Return to Activity (PRA) IAW operational allowances.

NOTE: Consider performing repeat Abbreviate Neuro Exam and assess for TBI Red Flags every 12 hours.

19. Document all additional findings, notifications, and treatments on the casualty's DD Form 1380 TCCC Casualty Card.