

Injured Trauma Survivor Screen (ITSS) User Guide

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Among those who suffer a traumatic injury and are subsequently admitted for their injuries, 10% to 42% will develop symptoms of posttraumatic stress disorder (PTSD) depending on certain pre-, peri-, and post-injury event characteristics.^{1,2,3,4,5,6} Many studies have also consistently linked traumatic injury with the occurrence of comorbid PTSD and depression, or depression alone.^{7,8,9,10,11}

The 9 items on the Injured Trauma Survivor Screen (ITSS) measure risk for the development of PTSD and depression up to six months post injury.^{12,13}

- **PTSD:** Items 3, 4, 7, 8, 9
- **Depression:** Items 1, 2, 3, 5, 6

Questions 1 and 2 are regarding the patient's experience prior to the traumatic event.

Questions 3 and 4 are regarding the patient's experience during the peritraumatic period, that is the period in which they were injured and immediately following. The peritraumatic period in the traumatic injury population may include the events just before the injury occurred, the injury, awaiting medical attention, their ride in either an ambulance or helicopter and/or awaking in the ED, ICU or other part of the hospital.

Questions 5-9 are regarding the patient's experience since the traumatic event.

Introducing the measure:

The ITSS was created for and normed on the injured trauma survivor population; specifically, those individuals admitted to the trauma service in a Level 1 Trauma Center. This measure is **not** currently validated on individuals with moderate to severe traumatic brain injuries, individuals admitted following a self-inflicted injury or suicide attempt, individuals admitted following a sexual assault, or individuals who are not currently oriented to person, place, time, or situation for any reason. When introducing the measure to patients in this environment a simple explanation of your intentions in collecting this information is helpful.

For example, "Just as we are concerned about your physical recovery, we would like to try and do our part to help facilitate a healthy emotional recovery as well. Would it be ok if I asked you a few yes-no questions to help determine any need for follow-up care?"

Calculating ITSS scores:

A response of "yes" to any question is scored as a 1. A response of "no" to any question is scored as a 0.

If the sum of questions 3, 4, 7, 8 and 9 is equal to or greater than 2, the screen is positive for PTSD risk. This is described on the measure itself.

If the sum of questions 1, 2, 3, 5, and 6 is equal to or greater than 2, the screen is positive for depression risk. This is also described on the measure itself.

Clarification of How to Score Responses to ITSS Questions:

In all situations it is best to simply encourage a “yes” or “no” response from the patient.

Examples:

- “If you had to pick ‘yes’ or ‘no,’ which would you pick?”
- “No need to overthink any one response, is it mostly ‘yes’ or mostly ‘no’?”

However, many patients will provide collateral information or not be willing to select “yes” or “no” despite these prompts. If a patient refuses to answer an item just continue on to the next one. Some common areas of confusion are described below.

BEFORE THIS INJURY:

1. Have you taken medication for, or been given a mental health diagnosis?

- “I don’t know. I saw a psychologist when I was little, but I think it was because I was angry all the time and I was skipping school. I don’t know if I was ever diagnosed with anything.”
- *ITSS Score:* No. This question is asking about individuals with a known diagnosed mood disorder for which they have sought medical or psychological intervention or have been given a specific diagnosis by a mental health professional.
- “Yes, I was diagnosed with ADHD when I was little.”
- *ITSS Score:* No. The ITSS is specifically inquiring about history of mood disorders, personality disorders, and psychiatric disorders, not neurodevelopmental disorders such as intellectual disabilities, communication disorders, or learning disorders.

2. Has there ever been a time in your life you have been bothered by feeling down or hopeless or lost interest in things you usually enjoyed for more than 2 weeks?

- Occasionally patients may indicate that they have been diagnosed with and taken medication for clinical depression and might still respond with a “no.” In most cases this is because not all professionals who are authorized to diagnose and/or treat mental health conditions adhere to specific criteria such as this.
- *ITSS Score:* No

WHEN YOU WERE INJURED OR RIGHT AFTERWARD:

3. Did you think you were going to die?

- Medical personnel often inform patients about the severity of injury, including threat to life. Also, patients often overhear medical care providers, such as EMTs and paramedics, stating that the patient may die which can cause confusion in scoring; below are two examples.
- “I thought I was going to die when the doctor told me how serious my injury is and that I’m lucky to be alive.”
- *ITSS Score:* Yes
- “When I woke up in the ER or ICU, I thought I was going to die.”

- *ITSS Score:* Yes. Again, this question is assessing whether someone thought that they were going to die, not whether this thought was initiated by the person or by someone else.

4. Do you think this was done to you intentionally?

- Often it is easiest to simply clarify that another word for “intentionally” is “on purpose.” The important aspect of this question is if the patient perceived the event as intentional.
- “Someone walked up behind me and shot me because we’ve been enemies since we were teenagers. He was trying to rob me because he knew I was carrying lots of money on me and wanted revenge.”
- *ITSS Score:* Yes
- “I can’t say. I don’t remember what happened.” (Patient was intoxicated, patient lost consciousness, etc.)
- *ITSS Score:* No
- “No” (when the patient was shot while being robbed)
- *ITSS Score:* No
- “I can’t say what someone else is thinking, it could have been an accident, and it could have been on purpose. There’s absolutely no way of knowing.”
- *ITSS Score:* No
- Patient: “I don’t know. They say it was accidental, but if it was accidental he would have reacted in a way that would have prevented my injuries, but he did run into a house and called the ambulance for me.” Respondent: “So, if you had to say ‘yes’ or ‘no,’ do you think this was done to you intentionally?” Patient: “It could have been, I don’t know.”
- *ITSS Score:* No

SINCE YOUR INJURY:

5. Have you felt emotionally detached from your loved ones?

- “I don’t have any loved ones. I’m not close to anyone.”
- *ITSS Score:* No. This is because they were likely feeling detached prior to the trauma, so this is not a change following the event.
- “I haven’t seen my family since I’ve been in the hospital. I don’t know.”
- *ITSS Score:* No
- “It’s too early for me to be able to say.”
- *ITSS Score:* No
- “Well, kinda.”
- *ITSS Score:* Yes

- “Yes, but I always feel this way.”
- *ITSS Score:* Ask the patient if this feeling started or increased since the injury. If the feeling started or increased since the injury, the response is scored as a “yes.” Otherwise, if the feeling is no different than prior to the injury, then it is scored as a “no.”

6. Do you find yourself crying and are unsure why?

- “Yes, but I know why.”
- *ITSS Score:* No

7. Have you felt more restless, tense or jumpy than usual?

- “I feel restless because I keep getting woken up every 5 minutes by someone coming into my room.”
- *ITSS Score:* No
- “Well, kinda.”
- *ITSS Score:* Yes
- “I always feel tense and restless.”
- *ITSS Score:* Ask the patient if this feeling started or increased since the injury event. If the feeling started or increased since the event, the response is scored as a “yes.” Otherwise, if it is the same it is scored as a “no.”

8. Have you found yourself unable to stop worrying?

- “Well, kinda.”
- *ITSS Score:* Yes
- “Yes, but I’ve never been able to stop worrying.”
- *ITSS Score:* Ask the patient if this feeling started or increased since the injury event. If the feeling started or increased since the event, the response is scored as a “yes.” Otherwise, if it is the same it is scored as a “no.”

9. Do you find yourself thinking that the world is unsafe and that people are not to be trusted?

- “No, I’ve been feeling like driving is very unsafe and I don’t know if I will ever want to drive again.”
- *ITSS Score:* Yes. Although in this case the individual has answered “no” to the broader question, the specifics of the answer indicate that this is a change from before the potentially traumatic event. A follow-up question may provide clarity such as, “is this fear of driving new since the accident?” However, it is relatively safe to assume that this belief about safety as it applies to driving is new.
- “Yes, I have always felt that way.”
- *ITSS Score:* Ask the patient if this feeling started or increased since the injury event. If the feeling started or increased since the event, the response is scored as a “yes.” Otherwise, if it is the same it is scored as a “no.”

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Injured Trauma Survivor Screen (ITSS)

1 = Yes 0 = No

Before this injury	PTSD	DEP
1. Have you ever taken medication for, or been given a mental health diagnosis?		1 0
2. Has there ever been a time in your life you have been bothered by feeling down or hopeless or lost all interest in things you usually enjoyed for more than 2 weeks?		1 0
When you were injured or right afterward		
3. Did you think you were going to die?	1 0	1 0
4. Do you think this was done to you intentionally?	1 0	
Since your injury		
5. Have you felt emotionally detached from your loved ones?		1 0
6. Do you find yourself crying and are unsure why?		1 0
7. Have you felt more restless, tense or jumpy than usual?	1 0	
8. Have you found yourself unable to stop worrying?	1 0	
9. Do you find yourself thinking that the world is unsafe and that people are not to be trusted?	1 0	
<div style="display: flex; justify-content: space-between;"> ≥ 2 is positive for PTSD risk ≥ 2 is positive for Depression risk </div> <div style="text-align: right; margin-top: 5px;">SUM =</div>		

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