### SCREENING FOR TBI EXPOSURE

**SCRTBI_EXP: Screening TBI Exposure**

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<tr>
<th>1. CDE Variable</th>
<th>SCRTBI_EXP: Screening for TBI exposure</th>
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<td>2. CDE Definition</td>
<td>This element will document lifetime exposure to TBI.</td>
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<th>3. Recommended instrument for assessment</th>
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<tr>
<td>Ohio State University TBI Identification Method-Short Form (OSU TBI-ID-SF). The OSU TBI-ID is a structured interview developed using recommendations from the CDC for the detection of history of exposure to TBI. It was designed to elicit self- or proxy-reports of TBI occurring over a person’s lifetime. The OSU TBI-ID-SF uses an interview methodology based on the original longer version, but only measures selected summary indices.</td>
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| 4. Description of measure | Structured Interview |

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<th>5. Permissible values</th>
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- **Ohio State Univ. TBI Identification Method Short Form (v.12-10-08)*

1. Have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
   - Yes
   - No

2. Have you ever injured your head or neck in a car accident or from some other moving vehicle accident? (e.g. motorcycle, ATV)
   - Yes
   - No

3. Have you ever injured your head or neck in a fall or from being hit by something (e.g. falling from a bike, horse, or rollerblades, falling on ice, being hit by a rock)? Have you ever been injured playing sports or on the playground?
   - Yes
   - No

4. Have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?
   - Yes
   - No

5. Have you ever been nearby when an explosion or a
blast occurred? If you served in the military, think about any combat-related incidents.
- Yes
- No

If all above are “no” then stop. If answered “yes” to any of the questions above, ask:
6. Were you knocked out or unconscious following any of the injuries you mentioned above? DO NOT INCLUDE LOSING CONSCIOUSNESS DUE TO DRUG OVERDOSE OR FROM BEING CHOKE (see #8, below).
- Yes
- No

If answer to #6 is “No”, ask:
7A. Were you dazed or have a gap in your memory from the injury(ies) you mentioned above? [RULE OUT ALCOHOL BLACKOUTS]
- Yes
- No

If answer to #6 is “Yes”, ask:
7B. How long were you knocked out? (If identified multiple injuries with loss of consciousness, ask for each. If not sure of the time frame, encourage them to make their best guess.)
1. __________ How old were you? ___
2. __________ How old were you? ___
3. __________ How old were you? ___
4. __________ How old were you? ___
5. __________ How old were you? ___
If more than 5, how many more? __
Longest knocked out? ______
How many ≥ 30 mins.? ______
Youngest age? ______

8. Have you ever lost consciousness from a drug overdose or being choked?
   _____ Number of times from a drug overdose
   _____ Number of times from being choked

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<th>6. Classification:</th>
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<tr>
<td>Basic/Intermediate/Advanced</td>
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<tr>
<td>Identical</td>
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<th>7. Procedure</th>
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<td>To avoid biases created by terminology used, the interview first elicits recall of all possible head or neck injuries through a series of queries tapping possible causes of TBI. For these injuries, the occurrence and length of loss of consciousness is probed, with age also being determined for those injuries with loss of consciousness. If there is no loss of consciousness, the presence of altered consciousness is probed. Finally, an estimate of the number of anoxic injuries due to drug</td>
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8. Comments/Special instructions:
Using the structured elicitation method of the OSU TBI-ID-SF, multiple dimensions of history are available, including number of injuries with loss of consciousness, number of injuries with loss of consciousness >30 minutes, age at first TBI with loss of consciousness, whether there was an injury with loss of consciousness before the age of 15, worst injury, and # anoxic injuries due to drug overdose or being choked.

A Scoring system has been developed to quantify these dimensions and to broadly categorize the likelihood of TBI exposure as: improbable – possible – mild TBI/complex mild or moderate and more severe TBI.

**SCORING**

| 1. # TBI-LOC (number of TBI's with loss of consciousness from #7b) |
| 2. # TBI-LOC ≥30 (number of TBI’s with loss of consciousness ≥30 minutes from #7b) |
| 3. age at first TBI-LOC (youngest age from #7b) |
| 4. TBI-LOC before age 15 (if youngest age from #7B <15 then =1, if ≥15 then = 0) |

**Worst Injury (1-5):**

- If responses to #1-5 are “no” classify as 1 “improbable TBI”.
- If in response to #6 and 7a reports never having LOC, being dazed or having memory lapses classify as 1 “improbable TBI”.
- If in response to #7a reports being dazed or having a memory lapse classify as 2 “possible TBI”.
- If in response to #7b loss of consciousness (LOC) does not exceed 30 minutes for any injury classify as 3 “mild TBI”.
- If in response to #7b LOC for any one injury is between 30 minutes and 24 hours classify as 4 “moderately severe TBI”.
- If in response to #7b LOC for any one injury exceeds 24 hours classify as 5 “more severe TBI”.

| 5. # anoxic injuries (sum of incidents reported in #8) |

9. Rationale/justification: The OSU TBI-ID can provide measures of the extent of exposure to TBI including the current injury. It has long been recognized that sustaining a TBI increases the risk for subsequent TBI’s. By improving our ability to measure lifetime exposure to TBI’s, we may be able to better identify factors which increase risk for subsequent TBI’s.

10. References:
Adapted with permission from the Ohio State University TBI Identification Method (Corrigan JD, Bogner JA. Initial reliability and validity of the OSU TBI Identification Method. *J Head Trauma Rehabil.* Nov-Dec 2007;22(6):318-329. © reserved 2007, The Ohio Valley Center for Brain Injury Prevention and Rehabilitation)