

**Results of Cognitive Testing of Questions on Traumatic Brain Injury**  
Meredith Massey, Sheba Dunston and Lauren Creamer

Collaborating Center for Questionnaire Design and Evaluation Research  
National Center for Health Statistics

January 2017

## **I. Introduction**

This report summarizes the findings of a cognitive interview study to test questions on traumatic brain injury (TBI) for the National Center for Injury Prevention and Control. There were an estimated 2.2 million Emergency Department (ED) visits, 280,000 hospitalizations, and 50,000 deaths attributed to TBI in 2010 (Bell, Breiding & DePadilla, 2017). However, these figures are based on healthcare administrative data that only capture a portion of the true incidence of TBI (Taylor, Greenspan et al. 2015). Therefore, it is the goal of the Centers for Disease Control and Prevention to develop a comprehensive mechanism to measure the true prevalence of TBIs. The purpose of this study was to evaluate questions on TBI as part of the development of an instrument intended to collect data on TBI occurrence, symptoms and co-occurrence.

This evaluation is based on 40 cognitive interviews that were conducted between August 2016 and December 2016 by the Collaborating Center for Questionnaire Design and Evaluation Research (CCQDER) at the National Center for Health Statistics. The following sections of this report include an overview of cognitive interviewing methodology, a summary of key findings, and a question by question analysis. The complete instrument can be found in Appendices A and B.

## **Methods**

*Cognitive Interviewing:* Cognitive interviewing is designed to evaluate items on survey questionnaires through qualitative methods. In particular, cognitive interviewing studies seek to uncover how respondents interpret and respond to questionnaire items based on their particular social and cultural contexts. Further, it can be determined whether these interpretations align with question intent. Findings of a cognitive interviewing project often lead to recommendations for question improvement, provide evidence of question validity and can be used in post-survey quantitative analysis to assist in data interpretation.

Cognitive interviewing studies typically involve in-depth, semi-structured interviews with a small sample of approximately twenty to forty respondents. In these interviews, respondents are first administered the survey items under evaluation and then answer a series of follow-up probe questions that reveal how respondents arrived at their particular response choices. These probes can be either

concurrent (asked with each survey item) or retrospective (asked after all survey items). Through this semi-structured design, various types of question-response problems, such as interpretive errors or recall accuracy, are uncovered.

Sample selection for a cognitive interviewing project is purposive with respondents selected for specific characteristics -- such as race, health status or occupation-- that are relevant to the intended purpose of survey instrument. Because of the small sample size, not all social and demographic groups are represented although an effort is made to maintain a varied sample.

Analysis of cognitive interview data involves a five step process of data synthesis and reduction. Through these steps- conducting the interview, summarizing interview data, comparing across respondents, comparing respondent subgroups and making conclusions- the complexities of the question response process are understood(Miller, Willson et al. 2014). In this way, it is possible to understand how individual questions perform as well as how questions perform across different subgroups of respondents. This information can be used to improve questions and to validate user end conclusions based on survey data.

*Sample:* A purposive sample of individuals with and without a head injury in the previous 12 months was recruited through newspaper advertisements. A team of researchers from the CCQDER interviewed a total of 40 respondents across three rounds of interviews. The first round consisted of self-responders (respondents answering for themselves) and proxy-responders (parents answering on behalf of a child). The second round consisted of eight parent-teen dyads. The teens answered for themselves while their parents were proxy responders. The third round of testing was conducted in Spanish on both self and proxy-responders. Thirty interviews were conducted in English and ten in Spanish. Interviews conducted in English were held in the lab at NCHS; those in Spanish were conducted in the Chicago area in respondents' homes. Interviews were no longer than one hour in length.

Table 1 summarizes the demographic composition of the sample.

	Self R1	Proxy R1	Self R2	Proxy R2
<b>Race/Ethnicity</b>				
Asian/American Indian or Alaskan Native	0	0		0
Black	5	5		5
White	2	1	1	4
Multiple	0	1		1
<b>Ethnicity</b>				
Hispanic	0	1	9	1

Non/Hispanic	7	6	8	
<b>Gender</b>				
Male	6	5	3	1
Female	1	2	6	8
<b>Education</b>				
Less than HS	0	0	5	0
HS or GED	2	0	2	1
Some College	3	2	2	2
Bachelor's Degree	0	3		4
Graduate Degree	2	2		2
<b>Age</b>				
12-17	0	0	8*	0
18-29	3	0	1	0
30-49	1	6	7	6
50-64	2	1	1	2
65+	1	0	0	1

*\*no other demographic data was collected from teens*

*Interviewing Procedures:* During the interviews intensive retrospective and concurrent verbal probing was used to collect response process data. Video/Audio recordings and written notes of interview summaries were collected and used as the basis of data analysis. Most interviews were conducted face-to-face in the Questionnaire Design Research Laboratory (QDRL) within the CCQDER while some were conducted off-site. Interviews lasted up to 60 minutes and respondents were given \$40 once the interview was complete.

*Data Analysis:* Post-interview analysis was done using Q-Notes, a qualitative software packages designed to facilitate cognitive interview analysis. After each interview was conducted, summary notes for each question were entered into Q-Notes. Summary notes included the way in which a respondent interpreted and processed individual questions, what experiences or perceptions the respondent included as they formulated their answer, and any response difficulties experienced by the respondent. After all interviews and summaries were completed, interviews were compared to identify common patterns of interpretation and response difficulties for each question. Sub-group analysis looked at patterns of interpretation and responses as they varied across different groups within the sample. Use of Q-Notes for this analytic process ensures systematic and transparent analysis across all cognitive interviews as well as provides an audit trail depicting the way in which findings are generated from the raw interview data.

### **III. Overall Findings**

#### **Overlap**

Some respondents had difficulty answering due to overlap of their concussion symptoms with symptoms from other conditions. In fact, respondents, in general, did not make clear distinctions between the separate causes of their various symptoms. In situations where respondents had concussions in addition to other medical issues, it was, at times, difficult for respondents to disentangle which of their symptoms were due to concussion and which were due to the other factors. For example, one respondent described how her child fell to the floor with a seizure. He was taken to the hospital where he was diagnosed with a seizure disorder. While he did hit his head when he fell and may have sustained a concussion, most of the symptoms he experienced could be attributed to either the concussion or the seizure disorder. Since the respondent was not sure which symptoms belonged to the concussion and which belonged to the seizure disorder, she made little attempt to distinguish between the two. Another respondent described hitting his head while on large doses of recreational drugs. Again, the respondent was not able to distinguish the symptoms of his possible concussion from the after-effects of the drugs. Instead, he lumped all of his symptoms (which included severe memory loss and a months' long catatonic state) together as a single incident, basing his answer on those symptoms

Similarly, respondents who had sustained multiple concussions were often not able to distinguish the symptoms of one concussion from the symptoms of the other. One respondent who was not sure if her head pain was due to a car accident or a later incident when she bumped her head said, "All I know is my head hurt. I don't know why." In these cases, respondents answered based on their symptoms without attributing those symptoms to a specific incident.

#### **Timeframe**

Some respondents had difficulty remembering details as far out as the 12 month timeframe. While it was relatively easy for respondents to recall recent incidents, it was more difficult for them to recall the details of incidents that had happened up to a year ago. One respondent explained his difficulty remembering the specifics of a head injury that had occurred 6 months prior saying, "This didn't happen yesterday." Another respondent said, "It's hard to remember this type of detail 8 months later."

Because of the difficulty of recall, respondents whose head injuries had happened more than 6 months prior were less certain of their responses. These respondents chose answers based on assumptions but expressed uncertainty. One respondent answered "yes" to the question about feeling dizzy (SYM 6). She said, "I don't remember feeling dizzy but I hit my head really hard, so I must have felt dizzy."

Further, it was sometimes difficult for respondents to distinguish incidents that had occurred almost a year ago from those that had occurred more than a year ago. This led to some response error as respondents included head injuries that they had sustained up to two years prior.

## Proxy

Respondents who answered as proxies for their children answered as best they could, but some had difficulty. Most could state with certainty whether their children had been diagnosed with a concussion or not, but other details were not as definite. Some respondents had not been present when the head injury occurred so had to answer based on the reports of others or based on their own best guess. One respondent answered questions about her child's symptoms based on what she had been told. When asked if her son lost consciousness, she said, "I wasn't told that. Nobody mentioned that to me, so I'd say no, but he may have. He may have."

Other respondents found it difficult to be certain of their children's symptoms even when they were present. Their child may have mentioned some symptoms but not others. When asked about her daughter's vision, one respondent said, "Well, she didn't say anything about it, but there was so much going on. Who knows?"

Additionally, some respondents reported that their children may not have been willing or able to fully describe their symptoms. One respondent described her child who was unable to speak due to pain and confusion. She wasn't sure how to answer several of the questions on symptoms because her child "didn't complain of anything. He wasn't speaking at all." Another respondent noted that her son was an unreliable source of information because he may have underreported his symptoms so he could keep playing the game that he was playing when the head injury occurred.

## IV. Question-by-Question Review

RECALL. WE ARE INTERESTED IN LEARNING ABOUT TIMES, IN THE LAST YEAR, WHEN [YOU/YOUR CHILD] EXPERIENCED AN INJURY TO YOUR HEAD OR NECK. THIS MIGHT HAVE BEEN FROM A BUMP, BLOW OR JOLT TO YOUR HEAD.

INJ. IN THE LAST YEAR, THAT IS SINCE ONE YEAR AGO FROM TODAY, [WERE YOU/WAS YOUR CHILD] EXAMINED IN A DOCTOR'S OFFICE, CLINIC, HOSPITAL OR ELSEWHERE BECAUSE OF AN INJURY TO THE HEAD OR NECK?

Answer	Cases
Yes	31
No	9

While most respondents were able to answer this question without difficulty, the question is more complex than it first appears. In order to formulate a response, respondents had to consider the four elements in the pre-amble and the question: cause, injury, timeframe, and location of exam. These elements are depicted in Figure 1.



Figure 1. Elements of questions on injury

*Cause.* The preamble [RECALL] instructs respondents to think about injuries that were caused by bumps, blows and jolts to the head. Most respondents limited their responses to this type of injury. However, a few thought about neck injuries that did not result from a bump, blow or jolt to the head. For example, one respondent thought about a pinched nerve in his neck while another thought about whiplash that his daughter sustained when the car stopped short. In these cases and others, the injuries occurred without a direct impact.

*Injury.* Respondents also had to consider the location of the injury. In round one, the preamble and the question both instruct respondents to consider head AND neck injuries. Most respondents thought about head injuries, but some thought about injuries specifically to the neck. In addition to the respondents mentioned above who had neck injuries but who had not hit their heads, other respondents had injuries to the neck that had resulted from impact. For example, one respondent hurt his neck, but not his head, in a bike accident where he was thrown from his bike.

In Round Two, the question was revised to eliminate reference to neck injuries. After this revision, only a single respondent answered based on a neck injury. This respondent hit her head in a car crash and was diagnosed with whiplash and a broken neck but was told she didn't have a concussion. Despite not having a concussion, she was seen by medical professionals because she hit her head so this would not be considered response error.

*Timeframe.* Both the preamble and the question ask respondents to consider injuries that have occurred within the last year. Most respondents paid attention to this timeframe, but a few did not. Four respondents answered 'yes' based on injuries that had occurred between one and two years prior. A single respondent answered 'no' even though his son's injury had occurred within the previous year. He answered 'no' because his son was not seen by a doctor the same day the injury occurred but rather several days later.

Potential response error was seen with a single respondent who answered 'yes' because she had gone to the doctor within the previous year for an injury that she sustained more than a year prior. Thus, the injury was more than a year old, but the doctor's visit was fairly recent.

*Location of exam.* Almost all respondents answered based on examinations that were made by medical professionals in a doctor's office, at the hospital or in an ambulance. A single respondent answered 'yes' because her child was examined by the coach on a sports field. After the coach's assessment, the child did not receive any additional medical attention. Although, this response does provide the information requested in the question, this may be considered response error since the child was never examined by a medical professional.

INJN. IN THE LAST YEAR, THAT IS SINCE ONE YEAR AGO FROM TODAY], HOW MANY TIMES DID [YOU/YOUR CHILD] GO TO A DOCTOR'S OFFICE, CLINIC, OR HOSPITAL OR [WERE YOU/ WAS YOUR CHILD] EXAMINED BECAUSE OF AN INJURY TO THE HEAD OR NECK?

This question was asked to respondents who answered 'yes' to INJ. However, due to the way the question was worded, respondents answered based on the number of times they (or their child) had been to the doctor rather than on the number of head injuries. For example, a respondent whose child had injured her head playing hockey answered "12" because she had taken her daughter to various doctors 12 times for the same hockey injury.

In Round Two, the question was revised to focus on the number of injuries rather than the number of doctor visits. This revision was effective in shifting respondents' focus from number of doctor visits to number of injuries. However, in Round Two, the question did not limit the injuries to head injuries, so some respondents thought about injuries other than head injuries. For example, a respondent whose child is a gymnast answered "4" because her child had injured her hamstring, her wrist, her knee and her head.

### **Spanish:**

INJN. EN EL ÚLTIMO AÑO, QUE SERÍA DESDE [INSERT DATE 1 YEAR AGO FROM TODAY], ¿CUÁNTAS VECES ["USTED"/ "SU HIJO"] HA IDO AL MÉDICO, A UNA CLÍNICA O A UN HOSPITAL O HA SIDO EXAMINADO DEBIDO A UNA LESIÓN EN LA CABEZA?

Spanish-speaking respondents answered based on the number of times they (or their children) had gone to the doctor rather than on the number of injuries they or their children had sustained. The Spanish version was not revised between rounds of testing.

PREJOG. : NOW I'D LIKE FOR YOU TO THINK ABOUT [IF YES TO INJ, READ "OTHER"] TIMES IN THE LAST YEAR WHEN [YOU/YOUR CHILD] MAY HAVE EXPERIENCED AN INJURY TO THE HEAD OR NECK. I WOULD LIKE YOU TO TELL ME ABOUT A HEAD OR NECK INJURY EVEN IF [YOU/YOUR CHILD] DID NOT GO TO SEE A DOCTOR FOR CARE. THIS MIGHT HAVE HAPPENED WHILE PLAYING A SPORT FOR FUN OR COMPETITION, OR WHILE [YOU WERE/YOUR CHILD WAS] DOING SOMETHING PHYSICALLY ACTIVE LIKE BICYCLING. IT MIGHT HAVE HAPPENED AS A RESULT OF A CAR

ACCIDENT OR BECAUSE SOMEONE HURT [YOU/YOUR CHILD]. OR, IT COULD HAVE HAPPENED BECAUSE [YOU/YOUR CHILD] TRIPPED, SLIPPED, OR FELL DOWN.

INJ2. OTHER THAN THOSE YOU HAVE ALREADY REPORTED TO ME, IN THE LAST YEAR, THAT IS SINCE ONE YEAR AGO FROM TODAY, DID [YOU/YOUR CHILD] EXPERIENCE ANY OTHER INJURIES TO [YOUR/THEIR] HEAD OR NECK?

Answer	Cases
Yes	14
No	26

Although all respondents were able to provide a response, this question, along with the preamble (PREJOG), posed some problems, particularly for proxy respondents. Initially, several respondents hesitated and expressed confusion. One said, “These questions are confusing. They’re long. I’m not sure what these questions are asking.” The preamble, in particular, added length to the question sequence and caused respondents to hesitate. Several Spanish-speaking respondents initially thought the question referred to the injury they had mentioned in the previous question. After several repetitions, these respondents answered about additional injuries.

As with INJ, this question was revised between rounds of testing to eliminate reference to neck injuries. In Round One, respondents mentioned pinched nerves and neck strain in addition to head injuries, but in Round Two, only head injuries were mentioned.

When answering the question, some respondents immediately thought of a specific incident and answered ‘yes,’ but several respondents, mostly proxy respondents, indicated that they weren’t sure whether there had been any additional injuries. One proxy answered ‘no’ because she couldn’t think of any specific examples but said, “I’m saying ‘no,’ but you know kids...I mean, a hit on the head. It happens all the time.” However, a few respondents felt more certain of their ‘no’ responses. One proxy said, “I’d know if he hit his head. The teacher would call me or he would tell me.” This pattern was also seen in self-responders with one respondent who answered ‘no’ and said, “I mean, I don’t think so,” but it was more prevalent in proxy-responders.

Response error was seen in a single respondent who answered outside of the previous year timeframe. She answered ‘yes’ based on an injury that had occurred almost two years prior.

**Spanish:**

INJ2. APARTE DE LAS LESIONES SOBRE LAS QUE YA ME INFORMÓ, EN LOS ÚLTIMOS DOCE MESES, ES DECIR, DESDE [INSERT DATE 1 YEAR AGO FROM TODAY], ¿[ “SUFRIÓ”/ “SU HIJO(A) SUFRIÓ”] CUALQUIER OTRA LESIÓN EN LA CABEZA?

Spanish-speaking respondents often missed the phrase “other than those you already reported to me...” and reported again about the same injuries they had mentioned in the previous question (INJ).

INJN2. IN THE LAST YEAR, THAT IS SINCE ONE YEAR AGO FROM TODAY, HOW MANY HEAD OR NECK INJURIES DID [YOU/YOUR CHILD] EXPERIENCE, NOT COUNTING THE INJURIES YOU HAVE ALREADY MENTIONED?

This question was asked of respondents who answered ‘yes’ to INJ2. Many respondents found this question confusing. The question specifies, “...not counting the injuries you’ve already mentioned,” and most respondents understood this to refer not just injuries they’d mentioned in INJ and INJN but also to injuries they mentioned when they answered ‘yes’ to INJ2. Some respondents answered ‘0’ because there were no injuries that they had not mentioned already (having already answered questions about injuries that required medical attention and injuries that did not require medical attention.) Other respondents provided a number, but expressed further uncertainty. One said, “I guess one. I don’t know. What are these? Trick questions?”

Respondents did not include minor bumps to the head. Rather, only memorable incidents that caused significant pain were included. For example, one respondent answered that her grandson had sustained ‘2’ football related head injuries. She later clarified, “Well, he gets hit every game. Its just the 2 that his coach pulled him out for.”

PREINTX. THANK YOU. NOW WE HAVE SOME MORE QUESTIONS ABOUT [YOUR/YOUR CHILD’S] INJURY.

PREOPN. I WILL BE ASKING YOU SOME FOLLOW-UP QUESTIONS ABOUT THESE INJURIES AND WOULD LIKE TO BE ABLE TO DISTINGUISH [THE TWO INJURIES/THE THREE INJURIES/THE THREE MOST RECENT INJURIES].

INJOPN1. CAN YOU BRIEFLY DESCRIBE WHAT CAUSED THE MOST RECENT INJURY?

This question was asked of all respondents who had more than one injury total for INJ and INJ2. For some respondents, the most recent injury was minor in comparison to other injuries they or their children had sustained. These respondents were eager to discuss their serious injuries and were confused about why they were being asked about a relatively minor injury. Ultimately, however, all respondents were able to provide an appropriate response.

PRESYM. IN THE NEXT SET OF QUESTIONS, I WILL BE ASKING WHAT HAPPENED TO [YOU/YOUR CHILD] IN THE MINUTES AFTER THIS INJURY. FOR EACH ONE I READ, PLEASE TELL ME IF IT HAPPENED TO [YOU/YOUR CHILD] OR NOT. WE ONLY WANT TO KNOW ABOUT THINGS CAUSED BY THE INJURY OR MADE WORSE BY THE INJURY.

SYM1. ADULT: “WERE YOU DAZED, FOGGY, CONFUSED, OR DISORIENTED?” / PROXY: “DID YOUR CHILD ACT OR APPEAR MENTALLY FOGGY?” / DIRECT: “DID YOU FEEL MENTALLY FOGGY?”

Answer	Cases
Yes	23
No	12
DK	3

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. A few respondents initially responded “all of the above” as if the question were asking about a list of discrete symptoms while other respondents chose a single item from the list. One respondent said, “I definitely felt confused. I’d choose that one.”

Some respondents were not sure what was meant by “foggy” or “mentally foggy” although most respondents seemed to have some idea. One respondent asked, “What do you mean by mentally foggy? Like I don’t know what’s going on?” Other respondents described this as feeling “out of it.”

Several proxy respondents indicated that they were not sure how to answer because they did not see their children in the minutes after the incident. One said, “You said minutes. I wasn’t close enough to see if she was foggy in the first few minutes after she fell.” Two of these proxies were not able to choose a response options and answered “Don’t know.” One answered ‘yes’ because her son’s team mates told her that he seemed “dazed” and another answered ‘no’ saying, “I guess not.”

**Spanish:**

SYM1. ADULT: “¿SE SINTIÓ ATURDIDO(A), ATOLONDRADO(A) O CONFUNDIDO(A)?” / PROXY: “¿SU HIJO(A) PARECÍA ESTAR CONFUNDIDO(A) MENTALMENTE?” / DIRECT: “¿USTED SE SINTIÓ CONFUNDIDO(A) MENTALMENTE?”

There was some disagreement among Spanish-speaking respondents about how losing consciousness factored into this question. Two Spanish-speaking respondents answered ‘yes’ because they lost consciousness and were not aware of what was going on while they were unconscious. One of them understood ‘*aturdido*’ to mean “not knowing what happened.” She said she could only remember what was happening, “until the impact of the airbag.” She went on to say, “That’s why I said ‘yes’ to ‘dazed’ because when it hit me, then I did not know what happened.” In contrast, another respondent answered ‘no’ because he passed out and was not aware of what was going on. A different respondent described her understanding of the question, “To me ‘*aturdido*’ means not that you have lost consciousness, but you do not function normally...you act slower.”

SYM2. ADULT: “Did you forget what happened just before or after the injury?” / PROXY: “Did your child have difficulty remembering what happened just before or after the injury?” / DIRECT: “Did you have difficulty remembering what happened just before or after the injury?”

Answer	Cases
Yes	18
No	19

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Some respondents understood this as a question about whether they remembered that they had been injured. One

respondent answered ‘yes’ and explained that it took him several weeks to connect his headaches and dizziness to hitting his head. During that time he did not remember that he had injured himself.

Other respondents understood this as a question about whether they had trouble remembering the events surrounding the injury. One respondent answered ‘yes’ and described his football injury, “I stayed on the ground for a few minutes. When I got up, I didn’t know. I guess they pulled me off to the side. I don’t know if they carried me or what.”

Respondents described varying levels of memory loss. One respondent answered ‘no’ even though she couldn’t remember much about her injury. She said, “I remember it vaguely and I remember the gist of what happened.” Another answered ‘yes’ because even though he could remember everything that happened he felt “dazed and confused.”

**SYM3. ADULT OR DIRECT: “DID YOU FEEL SICK TO YOUR STOMACH OR DID YOU VOMIT?” / PROXY: “DID YOUR CHILD COMPLAIN OF FEELING SICK TO HIS OR HER STOMACH?”**

Answer	Cases
Yes	10
No	27

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Almost all respondents understood the question in the same way. In general, respondents who answered ‘yes’ described nausea or vomiting in either themselves or their children. One said, “They kept trying to give me medicine and I kept throwing it up.” Respondents who answered ‘no’ indicated that they did not have these symptoms. A single respondent answered ‘no’ because her son was unable to speak right after the injury and, therefore, could not “complain” of anything.

There were some differences in how respondents answered. Some respondents paid attention to the preamble to this section (PRESYM) and answered ‘no’ if the nausea or vomiting did not occur within minutes of the injury. Other respondents did not attend to this instruction and answered ‘yes’ even if the nausea or vomiting was days later. One respondent who answered ‘yes’ even said, “It wasn’t right away though. It was later.” Similarly, one Spanish-speaking respondent answered ‘yes’ even though she experienced nausea when she awoke after being unconscious for three hours (during which she had surgery).

The level of nausea that respondents included varied. For example, one respondent answered ‘no’ because her child had only “mild complaints of nausea” while another respondent said, “Maybe a little” and answered ‘yes.’

**SYM4. ADULT OR DIRECT: “WERE YOU KNOCKED OUT, BLACKED OUT, OR DID YOU LOSE CONSCIOUSNESS, EVEN BRIEFLY?” / PROXY: “WAS YOUR CHILD KNOCKED OUT, BLACKED OUT, OR DID YOU CHILD LOSE CONSCIOUSNESS, EVEN BRIEFLY?”**

Answer	Cases
Yes	12
No	24

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. All respondents understood the question in the same way. One respondent described it as “I’m asleep! Like boxers get knocked out and go to sleep.” Respondents who answered ‘yes’ described a loss of consciousness while those who answered ‘no’ said they or their child did not lose consciousness.

A few respondents indicated that they weren’t entirely certain of their answer. For example, one respondent answered ‘no’ but then said, “I mean, I don’t think so.” Another respondent answered ‘yes’ and said, “I think I passed out. I’m guessing it was for a couple seconds.”

In Round Two, the question was revised to remove “blacked out.” The removal of this phrase did not have any noticeable impact on responses in Round Two.

**Spanish:**

SYM4. ADULT OR DIRECT: “¿SE QUEDÓ INCONSCIENTE O PERDIÓ LA CONCIENCIA, AUNQUE HAYA SIDO BREVEMENTE?”/  
 PROXY: “¿SU HIJO(A) SE QUEDÓ INCONSCIENTE O PERDIÓ LA CONCIENCIA, AUNQUE HAYA SIDO BREVEMENTE?”

Although most respondents thought about losing consciousness, not all did. Most respondents agreed with the respondent who answered ‘yes’ and described losing consciousness as being “like my brain turned off.” One respondent answered ‘yes’ even though she did not lose consciousness. She said that losing consciousness was “being confused.” She went on to say, “I was confused because I couldn’t grasp the moment. They would talk to me and... I was confused.”

Two respondents indicated that ‘*se quedo inconsciente*’ would sound better to them than ‘*perdio la conciencia*’ while others recommended ‘*perdio el conocimiento*.’

SYM4A. FOR HOW LONG? WAS IT...

Answer	Cases
A few seconds	3
More than a few seconds but less than 5 minutes	7
6 to 30 minutes	2
31 to 59 minutes	0
1 to 24 hours, or	1
More than 24 hours	0

This follow-up question was asked of respondents who answered ‘yes’ to SYM4. Respondents were not always certain how long they were unconscious, but despite their uncertainty, they were able to choose a broad response category. Most respondents used external cues to give them some indication of how long they were out. One said, “I had just looked at the clock so I know it couldn’t have been more than 5 minutes.” Another said, “My Dad said I was out for, like 20 minutes.”

PRESYM5. NOW WE’D LIKE TO ASK YOU ABOUT THINGS THAT HAPPEN TO SOME PEOPLE AFTER THIS KIND OF INJURY. SOME OF THESE DEVELOP IMMEDIATELY AFTER THE INJURY AND SOME DO NOT HAPPEN UNTIL HOURS OR DAYS AFTER THE INJURY. AGAIN, WE ONLY WANT TO KNOW ABOUT THINGS CAUSED BY THE INJURY OR MADE WORSE BY THE INJURY.

SYM5. ADULT OR DIRECT: “DID YOU HAVE A HEADACHE?” / PROXY: “DID YOUR CHILD COMPLAIN OF A HEADACHE?”

Answer	Cases
Yes	31
No	6

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. All respondents understood this question to refer to pain in the head and most described pounding headaches that lasted for hours or days after the injury, but some made distinctions between headaches and other types of head pain. Several respondents had head or neck pain that they attributed to muscle strain or bruising rather than to headaches. For example, one respondent was hit in the head with a ball which caused surface pain and bruising where the ball had hit. This respondent answered ‘no’ because he did not consider his pain to be a headache. At least one respondent was not able to discern which type of head pain she had felt. Although he answered ‘yes,’ he said, “I don’t really know if it was a headache. This whole area [side of head and neck] hurt... I thought I might have hit my head, but I didn’t.”

One respondent misunderstood the timeframe specified in the preamble. He answered ‘no’ because he had headaches for several months but they did not begin until a few days after the injury.

A single proxy-respondent answered ‘no’ because her son couldn’t talk after the injury and, therefore, couldn’t “complain” of a headache. After her teen was able to speak, he indicated that his head was sore.

SYM5A. DID THIS OCCUR...

Answer	Cases
Immediately after the injury	4
In the hours or days after the injury, or	9
Both immediately and in the hours or days after the injury?	18

This question was asked of respondents who answered ‘yes’ to SYM5. Several respondents indicated that it was difficult to choose a response option because they couldn’t remember this level of detail months after the injuries had occurred. These respondents based their responses on guesses or assumptions about how they or their children must have felt.

Most respondents understood this question to be asking about the duration of headaches due to head injuries. For example, one respondent explained why she responded ‘both immediately and in the hours or days after the injury,’ saying, “When I hit my head, I had a headache due to the stress from the blow, and then days after the injury, I would have headaches only on the side where I was hit.”

A few respondents answered based on when their headache symptoms began or how long their symptoms lasted. For example, one respondent who had a headache that started when he was hit on the head and lasted for seven days answered ‘immediately after the injury’ because that’s when the symptom began. Another respondent whose headache began right after his injury and lasted for several days answered ‘in the hours or days after the injury’ because he was still in pain days after he hit his head.

A few proxy-respondents weren’t sure whether their children had headaches immediately or not. One answered ‘both’ because she assumed that her child must have had a headache right after the impact. The other answered ‘in the hours or days after’ because, while she didn’t know how her child felt immediately after the injury, she was sure her child had a headache several days later.

SYM6. ADULT: “Was there ever a time when you were dizzy, uncoordinated, had poor balance, were stumbling around, or moved more slowly than usual?” / PROXY: “Did your child appear or complain of dizziness, appear to move in a clumsy manner, or have balance problems?” / DIRECT: “Was there a time when you were dizzy, moved in a clumsy manner, or had balance problems?”

Answer	Cases
Yes	26
No	10
DK	1

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Most respondents described their or their children’s symptoms in similar terms such as “stumbling around” or “walking off balance.” These symptoms lasted anywhere from 10 minutes to several months after the initial injury. One respondent answered ‘no’ but noted that since he didn’t get out of the car after the injury (before he was taken to the hospital), he didn’t have the opportunity to observe this symptom.

Several proxy respondents weren’t sure if their children experienced this symptom. One was unable to provide a response saying, “He wasn’t himself. He wanted to go to bed early, but I don’t know if that means he was dizzy.” Other proxies provided answers but indicated that they weren’t really sure.

In Round One, many respondents answered as if choosing single items from the list presented. For example, one respondent said, “Uncoordinated. I pick that one.” In Round Two, the question was revised to remove several items in the list. The removal of these phrases did not have any noticeable impact on responses in Round Two.

SYM6A. DID THIS OCCUR...

Answer	Cases
Immediately after the injury	10
In the hours or days after the injury, or	8
Both immediately and in the hours or days after the injury?	7

This question was asked to respondents who answered ‘yes’ to SYM6. All respondents answered based on when they or their children experienced symptoms of dizziness. Several respondents changed their answers after they thought more about when this symptom occurred. For example, one respondent answered ‘immediately’ but changed to ‘both’ when she remembered that her daughter was also dizzy while in the hospital the next day.

Respondents who answered ‘immediately’ thought of symptoms that were experienced “within 5-10 minutes of the injury” while respondents who answered ‘hours and days after’ thought about symptoms that began 45 minutes to several days later.

SYM7. ADULT OR DIRECT: “DID YOU HAVE BLURRED VISION, DOUBLE VISION OR CHANGES IN YOUR VISION?” /  
 PROXY: “DID YOUR CHILD HAVE OR COMPLAIN ABOUT VISUAL PROBLEMS SUCH AS BLURRY OR DOUBLE VISION?”

Answer	Cases
Yes	12
No	25

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Some respondents included seeing “stars” or “black spots” when answering this question. For example, one respondent answered ‘yes’ and said her daughter “saw stars- just like in the cartoons.”

One proxy respondent wasn’t sure of her response. She indicated that her child didn’t have blurred vision (answered ‘no’) but then said, “Well, that may have happened but I don’t recall him saying that.”

One Spanish-speaking respondent answered ‘yes’ but indicated that he thought that his vision difficulties and eye pain were due to the chemicals released during the accident rather than to his head injury.

SYM7A. DID THIS OCCUR...

Answer	Cases
Immediately after the injury	6
In the hours or days after the injury, or	3
Both immediately and in the hours or days after the injury?	4

This question was asked to respondents who answered ‘yes’ to SYM7. Respondents answered based on both when the symptom began and when they experienced the symptom. For example, one respondent answered “immediately” even though she had blurred vision for months following the injury because the symptom began right after the injury. Another respondent answered ‘both’ because right after the injury he saw stars and then in the days after the injury, his vision was blurred.

SYM8. Did [you/your child] have trouble concentrating?

Answer	Cases
Yes	25
No	12

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Some respondents answered on the basis of trouble concentrating as a primary symptom. These respondents described having trouble “focusing” or “paying attention.” Other respondents thought about trouble concentrating as a result of other symptoms such as pain, nausea or discomfort. For example, one respondent indicated that her daughter had trouble concentrating (answered ‘yes’) saying, “It’s hard to concentrate when you have a headache. She just didn’t want to be bothered.” Similarly, answered ‘yes’ and described how her daughter had trouble focusing on homework because she was distracted by her desire to go outside.

One respondent initially wasn’t sure which interpretation to use when formulating his response. He said, “Like, what do you mean?” He said he was very distracted by his overwhelming pain, but ultimately answered ‘no’ because when he returned to school, he was able to concentrate well enough learn and do his homework.

SYM8A. DID THIS OCCUR..

Answer	Cases
Immediately after the injury	3
In the hours or days after the injury, or	14
Both immediately and in the hours or days after the injury?	7

This question was asked to respondents who answered ‘yes’ to SYM8. Respondents answered based on both when the symptom began and when they experienced the symptom. For example, one respondent answered “immediately” even though she had trouble concentrating for months following the injury because the symptom began right after the injury. Another respondent answered ‘both’ because her child’s trouble concentrating began right after the injury and continued for several weeks.

Several proxy respondents expressed uncertainty. Two answered ‘hours or days after’ because they weren’t able to observe their children immediately after the injury. Another answered ‘hours or days’ because her daughter “didn’t admit to having trouble” until days later when she couldn’t concentrate on her homework.

One Spanish-speaking respondent indicated that she understood ‘*inmediamente*’ to mean “the same day as the injury.”

PRESYM9: THE NEXT QUESTIONS ARE ABOUT THINGS THAT MIGHT HAPPEN TO PEOPLE IN THE HOURS OR DAYS FOLLOWING THIS KIND OF INJURY. AGAIN, WE ARE ONLY INTERESTED IN THINGS CAUSED BY THE INJURY, OR MADE WORSE BY THE INJURY.

SYM9. ADULT: “DID YOU HAVE DIFFICULTY THINKING CLEARLY, REMEMBERING, OR LEARNING NEW THINGS?” / PROXY: “DID YOUR CHILD BECOME CONFUSED WITH DIRECTIONS OR TASKS OR ANSWER QUESTIONS MORE SLOWLY THAN USUAL?” / DIRECT: “DID YOU BECOME CONFUSED WITH DIRECTIONS OR TASKS, OR ANSWER QUESTIONS MORE SLOWLY THAN USUAL?”]

Answer	Cases
Yes	18
No	19

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Although SYM1, asked about symptoms that were experienced “in the minutes after the injury” and this one asks about symptoms that occurred “in the hours or days following,” respondents didn’t necessarily make this distinction. There was a lot of overlap in respondents understanding of this question and SYM1 (mentally foggy or confused) and SYM8 (trouble concentrating). Several said, “Yes. Like I said...” Similarly, respondents didn’t generally make a distinction between “thinking clearly” and “concentrating.” A few respondents focused their responses on difficulties they or their children had completing tasks such as cooking, dressing or doing homework.

A single respondent answered ‘no,’ but said he really wasn’t sure because his son wasn’t given anything to do, so he wasn’t able to assess this symptom.

SYM10. ADULT OR DIRECT: “WERE YOU SENSITIVE TO LIGHT OR NOISE?” / PROXY: “WAS YOUR CHILD SENSITIVE TO LIGHT OR NOISE?”

Answer	Cases
--------	-------

Yes	20
No	17

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. One respondent wasn’t sure what was meant by this question. He expressed confusion and asked, “You mean, I couldn’t hear??” He ultimately answered ‘no’ because he could still hear. However, almost all other respondents understood this as a question about sensitivity to either light or noise. Most respondents who answered ‘yes’ described how they or their children needed the lights off or the TV turned down for a period of time after the injury. A single respondent answered ‘no’ because he was sensitive to light but not noise.

This question was revised before Round Two to ask if respondents were “more sensitive than usual...” This revision did not have any noticeable impact on responses in Round Two.

SYM11. ADULT OR DIRECT: “DID YOU EXPERIENCE A CHANGE IN MOOD OR PERSONALITY SUCH AS IRRITABILITY, CHANGES IN EMOTIONAL RESPONSES, OR FEELING MORE BOTHERED BY THINGS?” /PROXY “DID YOUR CHILD ACT MORE OR LESS EMOTIONAL THAN USUAL, MORE IRRITABLE, OR MORE BOTHERED BY THINGS?”

Answer	Cases
Yes	20
No	17

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Some respondents answered ‘yes’ based on a change in their or their children’s emotional state after the injury. For example, one respondent said that his son was “not his usual funny self.” Another said that he was more irritable than usual. He said, “I used to not be bothered by people walking slow on the subway or long lines at grocery stores but after that, it just got to me. It was really annoying.”

Other respondents answered ‘yes’ based on their annoyance at the injury itself, symptoms of the injury or circumstances that resulted from the injury. For example, one respondent said, “I was annoyed that I fell down the stairs, but it wasn’t like a personality change or anything.” Like the respondent who said, “By the neck; I was bothered by my neck,” several respondents were bothered by specific symptoms. Additionally, another respondent described how frustrated her son was that he was pulled out of his football game after his injury.

Several respondents used the word “bother” in a slightly way. They answered ‘yes’ and indicated that they or their children didn’t want to be bothered by others. One respondent described her daughter’s mood after the injury, “She just didn’t want to be bothered by her brothers and sisters.”

SYM12. ADULT: “DID YOU HAVE TROUBLE WITH SLEEP? SUCH AS, DID YOU HAVE TROUBLE FALLING ASLEEP, WERE YOU MORE DROWSY THAN USUAL, DID YOU GET TIRED EASILY OR MORE FREQUENTLY THAN USUAL, OR DID YOU SLEEP

NOTICEABLY MORE OR LESS THAN USUAL?"/ PROXY: "DID YOUR CHILD APPEAR DROWSY, SLEEP MORE THAN USUAL OR APPEAR MORE TIRED OR FATIGUED?" / DIRECT: "DID YOU FEEL DROWSY, SLEEP MORE THAN USUAL OR FEEL MORE TIRED OR FATIGUED?"

Answer	Cases
Yes	21
No	16

This question was asked of all respondents who answered 'yes' to either INJ or INJ2. Some respondents answered on the basis of sleep or fatigue as a primary symptom of their injury. One respondent answered 'no' and said, "I could sleep just like normal" while another respondent answered 'yes' and said, "I slept a lot and then I couldn't sleep. My patterns were off."

Other respondents answered based on their difficulty sleeping due to other symptoms or circumstances of the injury. For example, several respondents answered 'yes' because they were kept awake by pain or discomfort. Additionally, some answered 'yes' because it was hard to sleep in the hospital or they were kept awake on purpose in order to monitor their condition.

This question was revised before Round Two to simplify the examples given in the question. This revision did not have any noticeable impact on responses in Round Two.

SRRX. DID [YOU/YOUR CHILD] EXPERIENCE THIS INJURY WHILE PLAYING A SPORT, OR WHILE ENGAGED IN PHYSICAL FITNESS OR RECREATIONAL ACTIVITY FOR FUN OR COMPETITION? PLEASE DO NOT INCLUDE CHORES PERFORMED IN OR AROUND THE HOUSE.

Answer	Cases
Yes	18
No	18
DK	1

This question was asked of all respondents who answered 'yes' to either INJ or INJ2. All respondents understood the question in the same way. Respondents who answered 'yes' mentioned doing activities such as playing sports, playing on a playground or riding bicycles. Those who answered 'no' mentioned activities such as working, car accidents or fighting. A single respondent who was in a haunted house when she injured her head said that it was "fun" but answered 'no' because it was not a sport.

**Spanish:**

SRRX. ¿["USTED"/ "SU HIJO(A)"] SUFRIÓ ESTA LESIÓN MIENTRAS JUGABA UN DEPORTE O MIENTRAS PARTICIPABA EN CONDICIONAMIENTO FÍSICO O UNA ACTIVIDAD RECREATIVA COMO DIVERSIÓN O COMPETENCIA? POR FAVOR, NO INCLUYA LAS TAREAS REALIZADAS EN EL HOGAR O SUS ALREDEDORES.

Spanish-speakers had a somewhat broader understanding of ‘physical fitness or recreational activity’ (*condicionamiento físico*). Similar to English-speaking respondents, Spanish speakers thought of doing exercise and playing sports including soccer and skateboarding. Additionally, Spanish-speakers also answered ‘yes’ if they or their children were doing more general recreational activities. One respondent answered ‘yes’ and described his accident, “It was the birthday of one of my friends. We were eating together. I missed a step; I slipped and fell down the stairs. Yes, I was spending time with friends.” Another answered ‘yes’ because her child was playing with a friend at the time of the injury.

INTENTX. WHICH OF THE FOLLOWING BEST DESCRIBES HOW THE INJURY HAPPENED? WOULD YOU SAY THAT...

Answer	Cases
Someone else injured [you/your child] on purpose	2
You/your child] tried to injure [yourself/him or herself]	0
It was an accident—no one intended to injure [you/your child], or	27
Something else happened?	2

Most respondents interpreted this question as asking if the injury happened with “intent” or “on purpose.” For example, one respondent clarified, “no intent” after answering ‘it was an accident.’

Some respondents interpreted this question to be asking about who was “at fault” for the accident. Respondents who answered ‘It was an accident’ described the incident “not intentional.” “An accident” included falling down stairs or bumping the head. One respondent answered ‘someone else injured you on purpose,’ because the respondent assigned fault to the driver who hit him while he was bicycling. One respondent whose child was injured in a fight answered ‘something else happened’ because it was not an accident, but, on the other hand, no one was at fault for the injury since they were all participating in the fight.

Respondents whose children were injured while playing sports had different responses. Some respondents whose children were injured playing sports answered ‘it was an accident’ because the injury was “not intentional” and was a normal part of game play. Other respondents chose ‘something else happened’ because it was not an accident but no one was at fault. Finally, one respondent chose ‘someone else’ because she assigned blame to the opposing player who “checked” her child during a hockey game.

BIKEX. DID [YOU/YOUR CHILD] EXPERIENCE THIS INJURY WHILE ON A BICYCLE OR A SELF-PROPELLED WHEELED VEHICLE?

Answer	Cases
Yes	3
No	29

This question was asked of respondents with a head injury who answered ‘no’ to SRRX. Respondents interpreted this question as asking if they were on a bicycle at the time of the injury. Respondents did not have difficulty answering this question. One respondent answered ‘yes’ and received the two follow-up questions.

**Spanish:**

**BIKEX.** ¿[“USTED”/ “SU HIJO(A)”] SUFRIÓ ESTA LESIÓN MIENTRAS ESTABA EN UNA BICICLETA O VEHÍCULO CON RUEDAS AUTOPROPULSADO?

Three Spanish-speaking respondents were confused by term ‘self-propelled.’ These respondents answered ‘yes’ even though they had been in car accidents. One respondent explained that she understood ‘self-propelled’ to mean “something that generates its own power.” Therefore, to her, a car is a self-propelled wheeled vehicle. Answering ‘yes’ to this question meant that respondents did not skip out of the follow-up questions.

**BIKE1X.** HOW DID THE INJURY HAPPEN? WAS IT DUE TO A...

Answer	Cases
Collision with a moving motor vehicle	1
Collision with another bicycle	0
Collision with a person	0
Collision with a stationary object	1
Fall from bicycle to surface (e.g., road, bike path, etc.),or	0
Something else?	

The two respondents who answered ‘yes’ to BIKEX were asked this question. One respondent answered ‘collision with a stationary object’ because the bike collided with an open car door. The other respondent answered ‘collision with a moving motor vehicle’ because he’d been in a car accident (and was only asked this question due to response error in the previous question). There's not enough data to note any patterns.

**BIKE4X.** WHAT WAS THE PRIMARY REASON [YOU WERE/ YOUR CHILD WAS] BICYCLING AT THE TIME OF THE INJURY? [WERE YOU/WAS YOUR CHILD]...

Answer	Cases
Riding primarily as a means of transportation (e.g., to get to work, to get to school, etc.)	0
Riding primarily for recreation, physical fitness, or competition	1
DON'T KNOW	0

The two respondents who answered 'yes' to BIKEX were asked this question. One respondent answered 'Riding primarily for recreation' because he was bicycling for recreation at the time of the injury. The other respondent did not answer because he had been in a car accident (and was only asked this question due to response error in BIKEX). There's not enough data to note any patterns.

MVX. DID [YOU/YOUR CHILD] EXPERIENCE THIS INJURY WHILE ON OR IN A MOTORIZED VEHICLE, SUCH AS A CAR, BUS, MOTORCYCLE, DUNE BUGGY, OR ALL-TERRAIN VEHICLE (ATV)?

Answer	Cases
Yes	7
No	26

This question was asked of respondents with a head injury who answered 'no' to SRRX and to BIKEX. One Spanish-speaking respondent answered 'no' because he had been driving a truck ('*camioneta*') when he collided with another vehicle. He was expecting to hear this in the list of examples. Of the four respondents answered 'yes,' three were injured in car accidents and one was in a bus accident. These respondents were asked the three follow-up questions.

MV3X. WHAT TYPE OF VEHICLE [WERE YOU IN/WAS YOUR CHILD IN]?

Answer	Cases
An ATV, off-road vehicle or dune buggy	0
A bus or truck	3
A car	4
A motorcycle or dirt bike	0
A personal water craft (i.e., Jet ski, ski doo)	0
Other	0
Another type of vehicle	0

This question was asked of respondents who answered 'yes' to MVX. Most respondents were comfortable choosing an answer category. However, within one proxy and self-report teen dyad, both respondents were thinking about a minivan, but the two decided on different categories. The proxy respondent answered 'Car,' but the teen respondent was not sure which answer category a minivan would fit into. The teen respondent ultimately decided that 'A bus or truck' was the best category since a mini-van is not a car.

MV2X. WERE [YOU/YOUR CHILD] WEARING A SEATBELT AT THE TIME OF THE INJURY?

Answer	Cases
Yes	5
No	2

This question was asked of respondents who answered ‘yes’ to MVX. Respondents did not have difficulty answering this question. The answers of parent proxies matched those of the teen self-responders.

MV6X. WHICH OF THE FOLLOWING BEST DESCRIBES HOW THE INJURY OCCURRED? DID [YOU/YOUR CHILD]COLLIDE WITH...

Answer	Cases
Another motor vehicle	4
A stationary object	1
An animal (e.g. a deer), or	0
Something else	1

This question was asked of respondents who answered ‘yes’ to MVX. While respondents generally understood the intent of this question, there was some confusion with the response categories. One respondent was confused because there was no *collision*; his vehicle “stopped short.” This respondent decided to answer ‘Something else.’ Another respondent was confused with the wording “Did you collide with...” The respondent explained, “I was in a vehicle and another vehicle hit the vehicle I was in, not me.” Eventually, this respondent decided to answer “Another motor vehicle,” but he was frustrated.

MV7X. WHY [WERE YOU/WAS YOUR CHILD] RIDING OR DRIVING AT THE TIME OF THE INJURY? [WERE YOU/WAS YOUR CHILD]

Answer	Cases
Riding or driving as a means of transportation (e.g., to get to work, to get to school, etc.)	4
Riding or driving for fun, for pleasure, or for competition	3

This question was asked of respondents who answered ‘yes’ to MVX. Most respondents were able to answer this question without difficulty. However, one respondent was not sure of her response. She answered ‘Riding or driving for fun, for pleasure, or for competition’ only because she did not think that her daughter was being taken to school at the time of the accident. In fact, she was not sure what her daughter was doing with her grandmother that day.

CAUSEX. WOULD YOU SAY THAT THE INJURY OCCURRED BECAUSE YOU ...

Answer	Cases
1. Fell without being struck or pushed	11
2. Were hit by an object or person, or were pushed against something?	3
Something else	2

This question was asked of respondents with a head injury who answered ‘no’ to SRRX as well as to BIKEX and MVX. While all respondents were able to find an appropriate answer category, a few needed to have the categories repeated in order to figure out which one applied to their situation.

Respondents who answered ‘Fell without being struck or pushed’ described falling onto the ground, falling down stairs, tripping and being pushed down a slide. Respondents who answered ‘Were hit by an object or person, or were pushed against something’ described unintentional bumps to the head or being pushed against something during a fight. The single respondent who answered ‘Something else’ pinched a nerve in his neck because he “slept wrong.”

FALLX. DID [YOU/ YOUR CHILD] FALL...

Answer	Cases
From the floor or from ground level, like a trip or slip	5
Down the stairs	2
From a height less than or equal to 10 feet, or	3
From a height greater than 10 feet	0

This question was asked of respondents with a head injury who answered ‘no’ to SRRX as well as to BIKEX and MVX. While respondents generally understood the intent of this question, the answer categories were not always straightforward. Respondents did not always intuit that the answer categories were mutually exclusive. Two respondents who fell down the stairs chose ‘Down the stairs,’ but one respondent who fell down the stairs chose ‘from the floor or from ground level, like a trip or slip’ because she “tripped” down the stairs. Respondents were not always sure of the height they or their children had fallen from. For example, one respondent estimated that her child fell from a slide that was 6-7 feet tall, but she wasn’t sure.

LOCX DID THIS INJURY OCCUR...

Answer	Cases
At your home	7
On a street	8
At a school	5
Park or recreational area	4
At a sports field or complex	4
Somewhere else?	6

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. While respondents generally understood the intent of this question, the answer categories were not always clear. Specifically, there was some overlap between the answer choices ‘at a sports or recreation center’ and other categories. For example, when a child had been injured on a sports field at school, respondents chose ‘at a school,’ but when a respondent was injured on a sports field within a housing complex, the respondent chose ‘at your home.’

WORK WERE YOU WORKING FOR PAY WHEN THE INJURY OCCURRED?

Answer	Cases
Yes	1
No	13

This question was asked of adult self-responders. A single respondent answered ‘yes.’ This respondent was “technically off the clock” but was finishing up her work shift. There’s not enough data to note any overall patterns.

CAUSEX2. WHAT INITIALLY CAUSED THE INJURY? FOR EXAMPLE, IF TWO INDIVIDUALS COLLIDED, AND THEN MADE CONTACT WITH THE GROUND, THE INITIAL CONTACT WOULD BE WITH ANOTHER PERSON. WAS THE INJURY INITIALLY DUE TO CONTACT WITH...

Answer	Cases
Another person	8
The ground	5
An object that was part of the activity like a ball or a goal	1
An object that was not part of the activity like the bleachers or a tree	2
Something else	4

This question was asked of respondents who answered ‘yes’ to SRRX. Although most respondents understood the question, a few were unsure which answer choice to choose. For example, one parent explained that her daughter was injured at gymnastic camp when flipping over an object. She hit the floor with her back while her knees swung up and hit her head. The respondent said, “...technically it would be the ground...maybe...I don’t know... She decided to choose “the ground.” Interestingly, her daughter answered “something else” thinking about her knees as the cause of the injury to her head.

**Spanish:**

¿QUÉ CAUSÓ LA LESIÓN INICIALMENTE? POR EJEMPLO, SI DOS PERSONAS CHOCARON Y DESPUÉS UNA HIZO CONTACTO CON EL SUELO, EL CONTACTO INICIAL HABRÍA SIDO CON OTRA PERSONA. ¿LA LESIÓN INICIALMENTE SE DEBIÓ AL CONTACTO CON...

The single Spanish-speaking respondent who answered ‘an object that was not part of the activity like the bleachers or a tree.’ This respondent had fallen down the stairs at a restaurant and indicated that the Spanish word ‘gradas’ used in the question to mean ‘bleachers’ actually means ‘stairs.’ A more appropriate word would be ‘tribuna.’

SYMSTILL. [ARE YOU/[IS YOUR CHILD] STILL EXPERIENCING ANY OF THE INJURY-RELATED SYMPTOMS THAT WE’VE TALKED ABOUT?

Answer	Cases
Yes	15

No	21
----	----

This question was asked of all respondents who answered ‘yes’ to either INJ or INJ2. Some respondents had difficulty differentiating injury-related symptoms from other symptoms. Specifically, some respondents thought of symptoms that they or their children that may or may not have been related to the head injury. For example, one respondent answered ‘no’ even though her child still has occasional headaches. Although the child never had headaches before the injury, the doctor attributed them to allergies. Another respondent first answered ‘yes’ then changed his answer to ‘no.’ He said yes because his son still had occasional headaches, but he added that those may be “ordinary headaches” and not due to the injury, so he changed his answer to no.

A few respondents answered ‘no’ to this question but then later described ongoing symptoms. Although it is not entirely clear why this happened, it could be that respondents answered the question based on being “mostly recovered.” As one respondent answered ‘no’ but then described how his daughter was still experiencing symptoms. He said, “She’s sore and stiff, but she’s back to being herself.”

SYMRECA. HOW LONG DID IT TAKE FOR [YOU/YOUR CHILD] TO RECOVER FROM ALL OF [YOUR/THEIR] INJURY-RELATED SYMPTOMS?

This question was asked of respondents who answered ‘no’ to SYMSTILL.

Most respondents interpreted this question as asking how long it took them or their children to recover from injury-related symptoms. Some respondents thought specifically about when they were “cleared” by a medical professional to measure recovery, while others thought of when they actually stopped feeling symptoms even if they were not officially “cleared” by a medical professional. Recovery times were between four days and three months.

PREMED. WE HAVE SOME QUESTIONS ABOUT MEDICAL CARE [YOU/YOUR CHILD] MAY HAVE RECEIVED BECAUSE OF THIS INJURY. FIRST [WERE YOU/WAS YOUR CHILD] EXAMINED IN DOCTOR’S OFFICE, CLINIC, HOSPITAL OR ELSEWHERE?

Answer	Cases
Yes	28
No	2

This question was asked of adult self- and proxy-respondents but not teens. Fourteen respondents were asked this question in the first round of testing. All respondents understood this as a question about the location of their or their children’s head injuries. Respondents who answered ‘yes’ were examined by doctors or nurses in the emergency room or at doctor’s offices, by paramedics/EMTs on a playing field or in an ambulance or by coaches, parents or other players on a playing field. Some of these examinations were immediately after the injury while some were as much as six months after the injury.

Before Round Two, this question was revised to focus on the person giving care rather than on the location of care. A single respondent was initially thought the question was about whether her child

had received a CAT scan or other head scan. After the question was repeated, she was able to answer the question. Respondents interpreted this question to be asking if they or their children were examined by a medical professional although a few respondents included coaches.

One respondent answered ‘yes’ to this question, but was not sure if her child received care for her head injury, because she was not present at the time of the injury. The respondent decided to answer ‘yes’ assuming that the coaches examined her daughter’s head injury as well as her leg injury.

EVWHOX. WHO FIRST LOOKED AT OR EXAMINED [YOU/YOUR CHILD] AFTER RECEIVING THIS INJURY. ? WAS IT...

Answer	Cases
A nurse	5
A doctor	3
A psychologist	0
An athletic trainer	3
Emergency Medical Services (EMS)	10
Someone else/Some other medical professional	6

This question was asked to respondents who said ‘yes’ to PREMED. Most respondents interpreted the question to be asking about the first medical professional to examine the injury. Respondents who chose ‘someone else’ thought about coaches, friends and parents rather than medical professionals.

Before Round Two, the question and answer categories were revised to focus on medical professionals. Most respondents in Round Two thought about the first medical professional to examine them or their children, but some weren’t sure which type of professional had done the examination. For example, one respondent answered ‘nurse’ but explained during probing that she did not know who first examined her.

One respondent was not sure if the question was asking who first checked the vital signs of her child or who first examined his head injury by taking brain scans. The respondent eventually concluded that the question was asking about the first medical professional to take her child’s vital signs and answered ‘a paramedic.’ The respondent explained that if the question was asking about the first examination of the head injury, she would have answered ‘a nurse’ because a nurse took brain scans for her child’s head injury and explained that there was no blood on her child’s brain.

EVTIMEX. HOW LONG AFTER THE INJURY [WERE YOU/WAS YOUR CHILD] FIRST EVALUATED BY [SEE ANSWER TO PREVIOUS QUESTION]? WAS IT...

Answer	Cases
At the time and place of the injury	12
After the time of the injury, but within 24 hours	11

Within 1 week	2
More than 1 week later	2

This question was asked to respondents who said ‘yes’ to PREMED. All respondents were able to answer without confusion. However, respondents did not always focus on medical professionals when answering this question. That is, respondents answered based on who they were thinking of in the previous question (EVWHOX). Therefore, respondents in Round One who answered that a coach or parent was the first person to perform the examination answered this question based on how long it took the coach or parent to do the examination.

EVWHEREX. WHERE DID THE FIRST EVALUATION TAKE PLACE?

Answer	Cases
In a doctor’s office or clinic	4
At a hospital or emergency department	8
Or somewhere else	9

This question was asked to respondents who indicated that the initial exam was not at the time and place of the injury. Some respondents interpreted this question to be asking where the first examination by the person that they mentioned in EVWHOX happened. For example, some respondents answered ‘Nurse’ or ‘Emergency Medical Services’ for EVWHOX and answered ‘somewhere else’ for this question because the examination occurred at the location of the injury or in the ambulance.

Other respondents shifted their notion of what the ‘first evaluation’ was. For example, one respondent answered ‘paramedic’ for EVWHOX but answered ‘Hospital’ for this question because he was examined by a doctor once he got to the emergency room at the hospital.

DOCX. DID THE FIRST EVALUATION TAKE PLACE AT...?

Answer	Cases
[Your/your child’s] regular doctor or primary care physician’s office	2
An urgent care clinic	3
A clinic in a pharmacy or grocery store	0
A sports medicine clinic	0
A concussion clinic, or	0
Some other place?	7

This question was asked to respondents who indicated that the initial exam was in a doctor’s office or clinic. Respondents thought about where they or their children were first examined after the initial injury or where they were first tested for a concussion. One respondent initially indicated (when answering EVWHOX) that his father was the first to find him but switched in this question to refer to a

doctor’s visit 6 months later when he was diagnosed with a concussion. Respondents who answered ‘some other place’ were thinking of sports fields, emergency rooms and ambulances.

HOSPX. DID THE FIRST EVALUATION TAKE PLACE AT...?

Answer	Cases
An emergency room	7
An outpatient clinic in a hospital	0
A sports medicine clinic in a hospital	0
An urgent care clinic in a hospital, or	1
At another location in a hospital	0
DK/NR	2

This question was asked to respondents who indicated that the initial exam was in a hospital or emergency department. Two respondents weren’t sure whether to count being examined by EMTs as a first exam or being examined by an emergency room nurse as the first exam. The respondent who answered ‘don’t know’ knew that she had gone to the hospital but wasn’t sure whether she had gone to the emergency room or not.

CAREX. DID YOU RECEIVE CARE FOR [YOUR/YOUR CHILD’S] INJURY AFTER THE INITIAL EXAMINATION?

Answer	Cases
Yes	19
No	7
DK/NR DON’T KNOW/NOT SURE	0

This question was asked to respondents who said ‘yes’ to PREMED. A number of respondents were confused by this question and asked for the question to be repeated. Some respondents expressed confusion about the term “care.” Other respondents simply asked, “What do you mean?” One Spanish-speaking respondent needed the question repeated several times and said, “This is confusing.”

Ultimately, there was no coherent understanding of what was meant by “care” and respondents interpreted the term in a variety of ways. Some respondents answered based on follow-up care they received from doctors, pharmacists and home health aides. A few respondents answered ‘yes’ because they were prescribed medication which they had to take after the initial exam. One respondent thought about how he remained in the hospital for a week after the initial exam. He answered ‘yes’ since he was cared for during that week-long stay. One respondent counted the ice pack he had received from an athletic trainer to be “care.” Finally, one respondent answered ‘no’ because he did not like the treatment recommendation his doctor made.

CAREAX. DID [YOU/YOUR CHILD] RECEIVE CARE FROM [YOUR/YOUR CHILD’S] REGULAR DOCTOR OR PRIMARY CARE PHYSICIAN?

Answer	Cases
Yes	12
No	10

This question was asked to respondents who answered ‘yes’ to CAREX. Some respondents were confused and did not know if this question was asking if they are their children had gone to their regular doctor at any point or only after the initial examination. For example, one respondent asked, “Are we transitioning to after the initial...?” Most respondents settled on the follow-up interpretation although a few were still thinking about their initial examination.

A single respondent answered ‘no’ because the follow-up visit was just to let the primary care doctor know what happened, not to get care.

CAREBX. WHAT ABOUT AN URGENT CARE CLINIC?

Answer	Cases
Yes	9
No	11

This question was asked to respondents who answered ‘yes’ to CAREX. Some respondents interpreted “urgent care clinic” as the hospital or hospital ER. Respondents that answered ‘yes’ were thinking of the initial visit to the hospital or ER. One respondent interpreted “urgent care clinic” as the urgent care department of a hospital, not the ER. This respondent answered ‘yes’ and was thinking of his initial visit to the urgent care department of the hospital.

Several Spanish-speaking respondents understood ‘urgent care clinic’ to be the same as an emergency department. One described an ‘urgent care clinic’ as where “the ambulance would pick me up and take me to the hospital right away. To emergencies.”

CARECX. A CLINIC IN A PHARMACY OR GROCERY STORE?

Answer	Cases
Yes	2
No	18

This question was asked to respondents who answered ‘yes’ to CAREX. Respondents were able to answer this question without confusion. One of the respondents who answered ‘yes’ to this question was thinking of his initial examination that happened in an urgent care clinic inside of a grocery store. This respondent also answered ‘yes’ to CAREBX which asked about an “urgent care clinic.”

CAREDX. A SPORTS MEDICINE CLINIC?

Answer	Cases
--------	-------

Yes	0
No	20

This question was asked to respondents who answered ‘yes’ to CAREX. One respondent was confused with the term “sports medicine clinic.” The respondent asked, “What’s the difference between a sports clinic and a regular clinic?” Most respondents agreed that a “sports medicine clinic” was a “doctor’s office that specializes in sports injuries.” A few respondents weren’t familiar with this type of clinic but were sure they hadn’t been to one.

CAREEX. A CONCUSSION CLINIC?

Answer	Cases
Yes	4
No	16

This question was asked to respondents who answered ‘yes’ to CAREX. Respondents answered ‘yes’ if they had been to a concussion clinic or neurologist after the initial examination elsewhere.

CAREFX. A HOSPITAL OR EMERGENCY DEPARTMENT?

Answer	Cases
Yes	12
No	8

This question was asked to respondents who answered ‘yes’ to CAREX. Respondents interpreted this question to be asking if they went to the ER. However, some answered based on their (or their children’s) initial examinations while others answered based on subsequent visits to the ER. Some respondents were thinking of the visit to the ER that was immediately after the initial examination that was made on the field or in the ambulance on the way to the ER.

TBIDX. FOLLOWING THIS INJURY, DID A MEDICAL PROFESSIONAL DIAGNOSE [YOU/YOUR CHILD] WITH A CONCUSSION OR TRAUMATIC BRAIN INJURY?

Answer	Cases
Yes	11
No	14

This question was asked to respondents who said ‘yes’ to PREMED. Respondents were able to answer this question without confusion. All respondents answered this question based on whether they or their children had been diagnosed with a concussion by a doctor. For example, one respondent explained, "I'm pretty sure I had a mild concussion though. I hit the back of my head." This respondent answered ‘no’ because there was no diagnosis from a doctor. In cases where the doctor didn’t mention

concussions one way or another, respondents answered ‘no.’ Some respondents mentioned other diagnoses such as epilepsy, Parkinson’s, neck sprain and whiplash. These respondents all answered ‘no’ in the absence of a concussion diagnosis.

**Spanish:**

TBIDX. DESPUÉS DE ESTA LESIÓN, EL PROFESIONAL MÉDICO LE DIO A [“USTED”/ “SU HIJO”] UN DIAGNÓSTICO DE CONMOCIÓN CEREBRAL O LESIÓN TRAUMÁTICA CEREBRAL?

Several respondents were not familiar with the term ‘conmocion cerebral’ (concussion).

WHYNOCRX. SOMETIMES IT IS VERY DIFFICULT FOR PEOPLE TO RECEIVE THE HEALTH CARE THAT THEY NEED OR WANT [FOR THEIR CHILD]. PLEASE SELECT THE PRIMARY REASON [YOU/YOUR CHILD] DID NOT RECEIVE HEALTH CARE FOR THIS INJURY.

Answer	Cases
You had difficulty paying for it	1
You did not have transportation	0
You could not take time off work	0
You did not think the injury [to your child] was serious	2

This question was asked of respondents who indicated that they did not receive care. The one respondent who answered ‘you had difficulty paying for it’ said he would have gone to the ER but he didn’t have insurance and couldn’t afford it. There was too little data to conduct a full analysis or determine a pattern.

WHYNOCRAX. WAS IT DIFFICULT TO PAY FOR BECAUSE ...

Answer	Cases
[You/your child] did not have health insurance	1
[You/your child] had insurance, but you could not or did not want to pay the amount you were responsible for	0
You did not have authorization from your insurance	0

This question was asked of respondents who indicated that it was difficult to pay for care. There was too little data to conduct a full analysis or determine a pattern.

HOSPSTAX. DID [YOU/YOUR CHILD] STAY IN A HOSPITAL OVERNIGHT OR LONGER BECAUSE OF THE INJURY?

Answer	Cases
Yes	7
No	13

This question was asked of respondents who indicated that they or their children had received care at a hospital. Respondents were able to answer this question without confusion. Some who answered ‘no’ explained that they were only in the hospital a few hours and did not have to stay overnight. Those who answered ‘yes’ gave reasons for their stay such as “to watch for more seizures” or “for observation.”

HOSPNITEX. HOW MANY NIGHTS DID [YOU/YOUR CHILD] STAY IN THE HOSPITAL BECAUSE OF THE INJURY?

This question was asked of respondents who indicated that they or their children had stayed overnight in the hospital. There was too little data to conduct a full analysis or assess a pattern.

HOSPTRX. After [you were/your child was] discharged from the hospital, did [you/your child] receive inpatient rehabilitation care from a rehabilitation center or nursing care facility because of this brain injury?

Answer	Cases
Yes	3
No	5

This question was asked of respondents who indicated that they or their children had stayed overnight in the hospital. There was too little data to conduct a full analysis or assess a pattern. The two respondents who answered ‘yes’ mentioned care from a home health care nurse and therapy from the primary care provider.

**Spanish:**

DESPUÉS DE QUE [“SE LE DIO DE ALTA”/ “SE DIO DE ALTA A SU HIJO(A)”] DEL HOSPITAL, ¿[ “USTED”/ “SU HIJO(A)”] RECIBIÓ ATENCIÓN DE REHABILITACIÓN COMO PACIENTE HOSPITALIZADO DE UN CENTRO DE REHABILITACIÓN O INSTALACIONES DE ATENCIÓN DE ENFERMERÍA DEBIDO A ESTA LESIÓN CEREBRAL?

Some respondents answered ‘yes’ when they had received hospital services as inpatients.

RECSERVX. IF HOSPITALIZED: [AFTER YOUR HOSPITALIZATION / AFTER YOUR CHILD’S HOSPITALIZATION] IF NOT HOSPITALIZED: AFTER THIS INJURY], DID [YOU/YOUR CHILD] RECEIVE SERVICES TO HELP GET WELL? SOME EXAMPLES MIGHT INCLUDE PHYSICAL THERAPY, SPEECH THERAPY, VOCATIONAL REHABILITATION, NEUROPSYCHOLOGICAL SERVICES, OR COUNSELING.

Answer	Cases
Yes	7

No	15
----	----

This question was asked to respondents who said ‘yes’ to PREMED. Respondents were able to answer this question with no confusion. Respondents who answered ‘yes’ mentioned services such as therapy in the primary care provider’s office, a home health aide and a visit to the neuropsychologist.

DASSESED. DID ANYONE CHECK YOU OUT TO SEE IF YOU WERE INJURED?

Answer	Cases
Yes	6
No	0

This question was asked to teen respondents. There was too little data to conduct a full analysis or assess a pattern. When answering, respondents thought of being checked out by a coach, a friend, a teacher and an EMT.

DBYWHOA. WHO WERE YOU FIRST ASSESSED BY?

Answer	Cases
A school nurse	0
An athletic trainer	0
A coach	2
A parent	1
Emergency Medical Services (EMS)	1
Your regular doctor or pediatrician	0
A specialist (e.g. sports medicine doctor, neurologist)	0
Another medical professional, or	0
Someone else	2

This question was asked to respondents who answered ‘yes’ to DASSESED. There was too little data to conduct a full analysis or assess a pattern. Initially, one respondent seemed confused and asked “treated by?” Ultimately, he answered ‘parent’ and said, “My mom because she gave me an ice pack then she took me to the doctor’s the next day.” Other respondents described being assessed by coaches, EMTs and a friends.

DBYWHOB. After you were checked out by [state from previous question response], were you checked out by any of the following people? Please say “yes” or “no” to each one.

Answer	Cases
Your regular doctor or pediatrician	2
A specialist (e.g. sports medicine doctor, neurologist)	1
Another medical professional, or	2
Someone else	0

This question was asked to respondents who answered ‘yes’ to DASSESSED. There was too little data to conduct a full analysis or assess a pattern. The respondent who answered ‘a specialist’ was referring to a doctor in a concussion clinic while the respondents who answered ‘another medical professional’ thought about doctors in a health clinics.

REMPLOYX. [WERE YOU/WAS YOUR CHILD] REMOVED FROM THE GAME, PERFORMANCE, OR PRACTICE AS A RESULT OF THE INJURY?

Answer	Cases
Yes	7
No	2

This question was asked of respondents aged 18-21 and proxy-respondents who answered ‘yes’ to SRRX. Those who answered ‘yes’ described how their children were removed from play in a game or on the playground by a trainer, parent or medical professional. The two that answered ‘no’ said that the injuries either happened at the end of the game or when the child was playing unsupervised.

REMWHOX. Who removed [you/your child] from play?

Answer	Cases
A doctor	1
An athletic trainer	1
An EMT or EMS	0
The Coach	2
A Parent	0
An official or referee	0
You removed [yourself/your child] from play	0
Other	3

This question was asked of respondents who answered ‘yes’ to REMPLAYX. Although all respondents were able to provide a response, some wanted to choose multiple response options (ie. doctor AND parent). For example, one respondent chose ‘doctor’ but wanted to choose “doctor and parent” because the decision to keep the child from play was made in consultation between the two. Respondents who answered ‘other’ were thinking of a league medical professional, the child’s friends and a referee.

RETURNX. [HAVE YOU/HAS YOUR CHILD] RETURNED TO FULL SPORTS/RECREATION ACTIVITY FOLLOWING THE INJURY?

Answer	Cases
Yes	5

No	2
----	---

This question was asked of respondents who answered ‘yes’ to REMPLAYX. There was too little data to conduct a full analysis. Respondents described their children returning to play after periods of healing ranging from one week to three months.

RETWHENX. DID [YOU/YOUR CHILD] RETURN TO FULL SPORTS/RECREATION ACTIVITY IN...?

This question was asked of respondents who answered ‘yes’ to RETURNX. There was too little data to conduct a full analysis. However, this question was met with some confusion because the type of response required was not immediately intuited by respondents. Ultimately respondents provided responses that indicated that their children returned to full activity after periods of rest that lasted from several days to three months.

CLEARED. [WERE/WAS”] [YOU/YOUR CHILD] CHILD CLEARED BY A DOCTOR TO RETURN TO PLAY?

Answer	Cases
Yes	2
No	1

This question was asked of respondents who answered ‘yes’ to RETURNX. There was too little data to conduct a full analysis. However, respondents were able to answer this question with no confusion.

RETWHOX. WHO MADE THE DECISION TO ALLOW [YOU/YOUR CHILD] TO RETURN TO PLAY?

Answer	Cases
An athletic trainer	1
An EMT or EMS	0
A coach	0
A Parent	1
An official or referee	0
You made the decision [IF INTTYPE=P READ “for your child”] to return to activity following the injury	0
Other	0

This question was asked to respondents who said ‘no’ to CLEARED. There was too little data to conduct a full analysis and assess a pattern. Respondents mentioned being cleared by parents and athletic trainers.

RETWHOAX. WHAT KIND OF DOCTOR MADE THE DECISION FOR [YOU/YOUR CHILD] TO RETURN TO ACTIVITY? WAS IT A...

Answer	Cases
--------	-------

A primary care provider	4
A sports medicine physician	0
An emergency department physician	0
A neuropsychologist or neurologist	0
Another type of health care provider	0

This question was asked to respondents who said ‘yes’ to CLEARED. There was too little data to conduct a full analysis.

SCHOMISS. DID YOUR CHILD MISS ANY SCHOOL DUE TO THE INJURY?

Answer	Cases
Yes	11
No	3

This question was asked of all proxy respondents. Respondents indicated whether their children had missed any school due to their head injuries. Respondents who answered ‘yes’ said their children missed school for periods ranging from partial days to several weeks. The one respondent who answered no mentioned the injury occurred during the summer and therefore her daughter did not miss school.

SCHOMISSA. HOW MANY DAYS?

This question was asked of respondents who said ‘yes’ to SCHOMISS. All respondents were readily able to provide a response. However, they were not always able to remember the exact number of days that their children had missed school. Answers ranged from “partial days” for doctors’ visits up to three weeks. One respondent in particular who had trouble coming up with an exact number, explained that her daughter initially missed 7 days but missed 9 days in total.

SCHOREC. DID YOUR CHILD’S HEALTH CARE PROVIDER MAKE ANY RECOMMENDATIONS ABOUT HOW YOU, SCHOOL PERSONNEL OR YOUR CHILD’S TEACHERS COULD HELP YOUR CHILD RETURN TO SCHOOL?

Answer	Cases
Yes	4
No	7

This question was asked of respondents who said ‘yes’ to SCHOMISS. All respondents understood the question as asking about providers’ recommendations to help their children return to school. Respondents mentioned general recommendation to take it slow, guidelines for participation as well as

lists of things not to do. For example, one respondent said the doctors told the teachers what to look for and how to deal with another seizure.

SHAREREC. WERE THESE RECOMMENDATIONS SHARED WITH THE SCHOOL?

Answer	Cases
Yes	4
No	0

This question was asked of respondents who said ‘yes’ to SCHOREC. There was too little data to conduct a full analysis. Similar to the previous question, respondents mentioned general recommendations to take it slow, guidelines for participation and lists of things not to do. Most of the communication to the school came from parents rather than directly from doctors. For example, one respondent explained that the doctor advised the child to “rest her brain” and not to do school work, but it took a lot of “advocacy” from the respondent to get the teachers to “back off” and not make her daughter do classwork or take exams.

TEACHTOL. WERE YOUR CHILD’S TEACHER(S) TOLD ABOUT YOUR CHILD’S INJURY?

Answer	Cases
Yes	10
No	0

This question was asked of all proxy respondents. Respondents understood that the question was asking if teachers were told about the injury. One respondent said, “When she went back, we told [the teacher] what had happened and gave her the doctor’s note.”

EXTHELP. DID YOUR CHILD RECEIVE EXTRA HELP, SUPPORT, OR SERVICES AT SCHOOL DUE TO THE INJURY?

Answer	Cases
Yes	4
No	6

This question was asked of all proxy respondents. Although all respondents understood the question as asking about help their children received at school after their injuries, there was some confusion about what counted as “extra help.” One respondent changed her answer from ‘yes’ to ‘no’ ultimately deciding that ‘no’ was a better response since the teachers didn’t “overload him” but there were no other accommodations. Other respondents thought about assignments that were brought home by the child’s classmates and shows of concern from the teacher. A respondent who answered ‘no’ did not consider extra time to take exams to be “extra help.”

RETLNGHT FOR HOW LONG DID YOUR CHILD RECEIVE THIS HELP?

This question was asked of respondents who said 'yes' to EXTHELP. There was too little data to conduct a full analysis or assess a pattern.

ACPERF. HAS YOUR CHILD'S GRADES DECLINED SINCE THE INJURY?

Answer	Cases
Yes	0
No	10

This question was asked of all proxy respondents. Most respondents were able to answer the question based on a comparison of their children's grades before and after the injury. However, one respondent was unsure because his child's grades "weren't that good to begin with." Ultimately, he answered 'no' because there had been no noticeable change.

ACPERF3. IS YOUR CHILD HAVING TO WORK HARDER FOR THE GRADES HE OR SHE HAD PRIOR TO THE INJURY?

Answer	Cases
Yes	0
No	11

This question was asked of respondents who answered 'no' to ACPERF. Respondents understood this question as asking whether their children had to exert more effort in school since the injury. All respondents answered 'no' although one respondent noted that his child "didn't work that hard to begin with."

WKMISSX. DID THE INJURY CAUSE YOU TO MISS OR STOP WORK THAT YOU DO FOR PAY?

Answer	Cases
Yes	7
No	7

This question was asked of adult self-responders. Respondents answered based on whether they had missed any paying work due to their head injury. Respondents who said 'yes' described missing days of work with or without pay. Respondents who said 'no' either did not miss any days of work or were not working at the time of the injury.

HMMISSX. DID THE INJURY CAUSE YOU TO MISS OR STOP OTHER RESPONSIBILITIES YOU HAVE, LIKE TAKING CARE OF YOUR FAMILY OR VOLUNTEER WORK?

Answer	Cases
Yes	7
No	7

This question was asked of adult self-responders. Respondents generally understood the question. Respondents who answered ‘yes’ mentioned a disruption in their daily routines. Those who answered ‘no’ indicated that their usual routines were not disrupted or that they did not have the option of not taking care of their responsibilities. One respondent said, “Well, I’m not going to stop taking care of my family.” Even though he was able to do less than usual, he still believed he was taking care of his responsibilities.

LIFETBIDX. IF THERE WAS AN INJURY IN THE LAST 12 MONTHS: “OTHER THAN WHAT YOU HAVE ALREADY REPORTED”

THINKING ACROSS [YOUR/ YOUR CHILD’S” ENTIRE LIFE, HAS A DOCTOR, NURSE, OR OTHER MEDICAL PROFESSIONAL EVER TOLD [YOU/ YOUR CHILD] THAT [YOU/ HE OR SHE] HAD A CONCUSSION OR ANY OTHER TYPE OF BRAIN INJURY CAUSED BY A BLOW TO THE HEAD?

Answer	Cases
Yes	10
No	30

This question was asked of all respondents. A few respondents were confused by the phrase “Other than what you’ve already reported.” One respondent said, “After what, now?” Several respondents ignored this phrase and included injuries previously mentioned in their responses.

Other respondents were confused by the phrase “blow to the head.” One answered ‘no’ but later changed her answer to ‘yes’ saying “I heard ‘blow to the head’ and that threw me off. I thought it meant someone hit me on the head.” Another said, “I guess the [gymnastics injury he had previously mentioned] is a ‘blow to the head.’ It’s really more of a strike to the head though.”

Some respondents weren’t sure whether there had been a diagnosis or not. One respondent said, “I can’t remember what it was called. Maybe a concussion but maybe something else.”

Finally, some respondents who answered ‘no’ exhibited symptoms of concussions but did not have a formal diagnosis from a doctor. For example, one respondent said that her head hit a wall while she was in a fight. She didn’t go to the doctor, so she didn’t have a diagnosed concussion, but her head hurt for two solid weeks.

LIFETBIDXN. HOW MANY CONCUSSIONS, OR OTHER TYPES OF BRAIN INJURY CAUSED BY A BLOW TO THE HEAD, [HAVE YOU/HAS YOUR CHILD] HAD IN [YOUR/HIS OR HER] LIFETIME?

This question was asked of respondents who answered ‘yes’ to LIFETBIDX. Respondents answered based on both diagnosed and undiagnosed concussions. One respondent answered 6 and said, “I’ve only been to the doctor for three of them.” Several respondents also included injuries that had occurred within the last year –injuries that they had previously mentioned- in this count.

TBINODX1. A CONCUSSION HAS OCCURRED ANYTIME A BLOW TO THE HEAD CAUSED [YOU/YOUR CHILD] TO HAVE SYMPTOMS, WHETHER JUST MOMENTARILY OR LASTING AWHILE. SYMPTOMS INCLUDE: BLURRED OR DOUBLE VISION, SEEING STARS, SENSITIVITY TO LIGHT OR NOISE, HEADACHES, DIZZINESS OR BALANCE PROBLEMS, NAUSEA, VOMITING, TROUBLE SLEEPING, FATIGUE, CONFUSION, DIFFICULTY REMEMBERING, DIFFICULTY CONCENTRATING, OR BEING KNOCKED OUT.

IF THERE WAS AN INJURY IN THE LAST 12 MONTHS: “OTHER THAN WHAT YOU HAVE ALREADY REPORTED IN THE LAST 12 MONTHS” IN [YOUR/YOUR CHILD’S] LIFETIME, DO YOU BELIEVE THAT [YOU HAVE/YOUR CHILD HAS] EVER HAD A CONCUSSION OR OTHER TYPE OF BRAIN INJURY OTHER THAN THOSE DIAGNOSED BY A MEDICAL PROFESSIONAL?

Answer	Cases
Yes	9
No	31

This question was asked of all respondents. In contrast to all the other questions presented which are factual, this question is attitudinal; that is, it asks about respondents’ beliefs rather than facts about their head injuries. Most respondents understood that this question was asking about non-diagnosed head injuries. One said, “Non-diagnosed. That means I didn’t go to the doctor.” However, a few respondents included diagnosed concussions that had occurred in the past or within the last year.

Some respondents who answered ‘no’ indicated that they had experienced some of the symptoms mentioned due to head injuries but did not include these injuries when answering the question because they didn’t believe the injuries were concussions. For example, one respondent described being removed from football games many times due to helmet-to-helmet contact that left him dazed and dizzy. He answered ‘no’ because no one told him he had a concussion and he was able to resume play after a few minutes. Another respondent said that she got a huge knot on her head and a headache that lasted for weeks, but she didn’t believe this was a concussion so she answered ‘no.’ A clear example of how respondents do not always pay attention to the long preamble to this question was seen when one Spanish-speaking respondent was asked to summarize what a concussion was. Even after hearing the definition and examples in the preamble, he said a concussion was “something you can die from or end up messed up. A blow can leave you paralytic”

Some respondents, particularly proxies, expressed uncertainty. One respondent said, “I’m not sure. It’s very possible that [his son] bumped his head and didn’t tell me. I’m just answering based on what I

know.” Even self-responders weren’t always certain. One respondent said that he was told that he was dropped on his head as a baby, but he didn’t know for sure. Another respondent noted that it was too difficult to remember what happened in childhood. He said, “There’s a whole lot in childhood where you bump your head. We’re going to leave that alone.”

TBINODXN. HOW MANY NON-DIAGNOSED CONCUSSIONS, OR OTHER TYPE OF BRAIN INJURY [HAVE YOU/HAS YOUR CHILD] HAD IN [YOUR/HIS OR HER] LIFETIME?

This question was asked of respondents who answered ‘yes’ to TBINODX1. Some respondents noted that it was difficult to come up with an exact number. One said, “Many. It would be too hard to count.”

Respondents answered based on both diagnosed and undiagnosed concussions. Their counts included injuries that had occurred within the last year- that they had previously mentioned as well as injuries from more than a year ago. After respondents were asked the next question (LTSRR), many thought of additional non-diagnosed concussions that had occurred during sports which they had not included in their initial responses to this question.

LTSRR. [WAS THIS/WERE ANY OF THESE] CONCUSSIONS EXPERIENCED WHILE PARTICIPATING IN SPORTS OR A RECREATIONAL ACTIVITY FOR FUN OR COMPETITION?

Answer	Cases
Yes	5
No	4

This question was asked of respondents who answered ‘yes’ to either LIFETBIDX orTBINODX1. Respondents mentioned injuries that occurred while playing sports such as football, soccer, basketball and hockey. One respondent answered ‘yes’ based on a concussion her daughter had received while visiting a haunted house. The respondent said, “I guess it was for fun.”

AGETBI. HOW OLD WERE YOU AT THE TIME OF [THIS/THE FIRST] BRAIN INJURY OR CONCUSSION?

This question was asked of respondents who answered ‘yes’ to either LIFETBIDX orTBINODX1. A few respondents were confused by the term “brain injury.” One said, “Brain injury? No brain injury. A regular head injury...[the question] does not apply.”

Several respondents indicated that they couldn’t remember when the first injury occurred. One said, “I’m not going to try and remember what happened to me as a kid.” This respondent answered ‘don’t know.’ Other respondents gave a guess but expressed uncertainty about the exact age when the injury occurred.

## Works Cited

Bell, J. M., Breiding, M. J., & DePadilla, L. (2017). CDC's efforts to improve traumatic brain injury surveillance. *Journal of Safety Research*.

Miller, K., et al. (2014). Cognitive Interviewing Methodology: A Sociological Approach for Survey Question Evaluation. Hoboken, NJ, Wiley.

Taylor, C. A., et al. (2015). "Comparability of national estimates for traumatic brain injury-related medical encounters." The Journal of head trauma rehabilitation **30**(3): 150.

## Appendix A

### TRAUMATIC BRAIN INJURY SURVEY: English Language Instrument

Inclusion Criteria	Question
Past 12 months TBI	
<i>ASK IF ADULT, PROXY, OR DIRECT</i>	RECALL. We are interested in learning about times, in the last year, when [you/your child] experienced an injury to your head or neck. This might have been from a bump, blow or jolt to your head.
<i>ROUND TWO</i>	RECALL. We are interested in learning about times, in the last year, when [you/your child] experienced an injury to your head. This might have been from a bump, blow or jolt to [your/their] head.
<i>ASK IF ADULT, PROXY, OR DIRECT</i>	INJ. In the last year, that is since one year ago from today, [were you/was your child] examined in a doctor's office, clinic, hospital or elsewhere because of an injury to the head or neck? 1. YES 2. NO
<i>ROUND TWO</i>	INJ. In the last year, that is since one year ago from today, [were you/was your child] examined in a doctor's office, clinic, hospital or elsewhere because of an injury to the head?
<i>ASK IF ADULT, PROXY, OR DIRECT AND INJ =1</i>	INJN. In the last year, that is since one year ago from today], how many times did [you/your child] go to a doctor's office, clinic, or hospital or [were you/ was your child] examined because of an injury to the head or neck? ENTER COUNT: _____
<i>ROUND TWO</i>	INJN. In the last year, that is since one year ago from today, how many injuries did [you/your child] have that caused [you/your child] to go to a doctor's office, clinic, or

Inclusion Criteria	Question
	hospital or to be examined elsewhere?
<i>ASK IF ADULT, PROXY, OR DIRECT</i>	PREJOG. : Now I'd like for you to think about [IF YES TO INJ, read "other"] times in the last year when [you/your child] may have experienced an injury to the head or neck. I would like you to tell me about a head or neck injury even if [you/your child] did not go to see a doctor for care. This might have happened while playing a sport for fun or competition, or while [you were/your child was] doing something physically active like bicycling. It might have happened as a result of a car accident or because someone hurt [you/your child]. Or, it could have happened because [you/your child] tripped, slipped, or fell down.
<i>ASK IF ADULT, PROXY, OR DIRECT</i>	INJ2. Other than those you have already reported to me, in the last year, that is since one year ago from today, did [you/your child] experience any other injuries to [your/their] head or neck? 1. YES 2. NO
<i>ROUND TWO</i>	INJ2. Other than those you have already reported to me, in the last year, that is since one year ago from today, did [you/your child] experience any other injuries to [your/their] head?
<i>ASK IF ADULT, PROXY, OR DIRECT AND INJ2 =1</i>	INJN2. In the last year, that is since one year ago from today, how many head or neck injuries did [you/your child] experience, not counting the injuries you have already mentioned? ENTER COUNT: _____
<b>TRANSITION</b>	
<i>ASK IF ADULT, PROXY, OR DIRECT AND INJN &gt;=1</i>	PREINTX. Thank you. Now we have some more questions about [your/your child's] injury.
<b>INJURY DESCRIPTION IF MORE THAN ONE INJURY; NOTE ONE QUESTION IS REQUIRED EVEN IF THERE IS ONLY ONE INJURY</b>	
<i>ASK IF ADULT, PROXY, OR</i>	PREOPN. I will be asking you some follow-up questions about

Inclusion Criteria	Question
<i>DIRECT AND INJN + INJN2 &gt;1</i>	these injuries and would like to be able to distinguish [the two injuries/the three injuries/the three most recent injuries].
<i>ASK IF ADULT, PROXY, OR DIRECT AND INJN + INJN2 &gt;1</i>	<p>INJOPN1. Can you briefly describe what caused the most recent injury</p> <p>INTERVIEW: write brief DESCRIPTION</p> <p>01. _____ [ENTER RESPONSE TEXT RANGE= XXXX]</p> <p>97 DON'T KNOW</p> <p>99 REFUSED</p>
<p><i>ASK IF ADULT, PROXY, OR DIRECT AND <u>INJN + INJN2 =&gt;1</u> (<u>NEED MONTH EVEN IF IT IS ONLY ONE INJURY</u>)</i></p>	<p>MONTH. In what month did the injury occur?</p> <p>1. JANUARY</p> <p>2. FEBRUARY</p> <p>3. MARCH</p> <p>4. APRIL</p> <p>5. MAY</p> <p>6. JUNE</p> <p>7. JULY</p> <p>8. AUGUST</p> <p>9. SEPTEMBER</p> <p>10. OCTOBER</p> <p>11. NOVEMBER</p> <p>12. DECEMBER</p> <p>97. DON'T KNOW/NOT SURE</p>
<p><b><i>REPEAT FOR UP TO THREE INJURIES, THEN MOVE TO SIGNS AND SYMPTOMS</i></b></p>	
<p>Signs/Symptoms (Incidence)</p>	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT FOR ONE TO THREE INJURIES. IF THERE IS MORE THAN ONE INJURY, REPEAT THIS SECTION FOR UP TO THREE INJURIES-REFER TO EACH INJURY USING INJOPN1 AND MONTHN TO REMIND THE RESPONDENT WHICH INJURY YOU ARE ASKING ABOUT. COMPLETE SIGNS/SYMPTOMS AND NEXT SECTION FOR ONE</i></p>	

Inclusion Criteria	Question
<i>INJURY BEFORE MOVING TO THE NEXT INJURY</i>	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND THERE IS MORE THAN ONE INJURY</i>	<p>PRESYMMU. Now I'd like to discuss the injuries you told me about. Let's discuss the one you described as [INJOPN1] that occurred in [MONTHN].</p> <p>01. CONTINUE</p>
	<p>PRESYM. In the next set of questions, I will be asking what happened to [you/your child] in the minutes after this injury. For each one I read, please tell me if it happened to [you/your child] or not. We only want to know about things caused by the injury or made worse by the injury.</p> <p>01. CONTINUE</p>
	<p>SYM1. ADULT: "Were you dazed, foggy, confused, or disoriented?" /  PROXY: "Did your child act or appear mentally foggy?"  DIRECT: "Did you feel mentally foggy?"</p> <p>1. YES  2. NO</p>
	<p>SYM2. ADULT: "Did you forget what happened just before or after the injury?" /  PROXY: "Did your child have difficulty remembering what happened just before or after the injury?" /  DIRECT: "Did you have difficulty remembering what happened just before or after the injury?"</p> <p>1. YES  2. NO</p>

	<p>SYM4. ADULT OR DIRECT: "Were you knocked out, blacked out, or did you lose consciousness, even briefly?" /  PROXY: "Was your child knocked out, blacked out, or did you child lose consciousness, even briefly?"</p> <p>1. YES  2. NO</p>
<i>ROUND TWO</i>	SYM4. ADULT OR DIRECT: "Were you knocked out or did you lose

	consciousness, even briefly?"/ PROXY: "Was your child knocked out or did your child lose consciousness, even briefly?"
<i>ASK IF SYM4=1</i>	SYM4A. For how long? Was it... <ol style="list-style-type: none"> <li>1. A few seconds</li> <li>2. More than a few seconds but less than 5 minutes</li> <li>2. 6 to 30 minutes</li> <li>3. 31 to 59 minutes</li> <li>4. 1 to 24 hours, or</li> <li>5. More than 24 hours</li> </ol>
	PRESYM5. Now we'd like to ask you about things that happen to some people after this kind of injury. Some of these develop immediately after the injury and some do not happen until hours or days after the injury. Again, we only want to know about things caused by the injury or made worse by the injury.
	SYM5. ADULT OR DIRECT: "Did you have a headache?" / PROXY: "Did your child complain of a headache?" <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<i>ASK IF SYM5=1</i>	SYM5A. Did this occur... <ol style="list-style-type: none"> <li>1. Immediately after the injury</li> <li>2. In the hours or days after the injury, or</li> <li>3. Both immediately and in the hours or days after the injury?</li> </ol>
	SYM6. ADULT: "Was there ever a time when you were dizzy, uncoordinated, had poor balance, were stumbling around, or moved more slowly than usual?" / PROXY: "Did your child appear or complain of dizziness, appear to move in a clumsy manner, or have balance problems?" / DIRECT: "Was there a time when you were dizzy, moved in a clumsy manner, or had balance problems?" <ol style="list-style-type: none"> <li>1. YES</li> </ol>

	2. NO
<i>ROUND TWO</i>	ADULT: "Was there ever a time when you were dizzy, clumsy or had balance problems?" / PROXY: "Did your child appear dizzy or complain of dizziness, appear to move in a clumsy way, or have balance problems?" / DIRECT: "Was there ever a time when you were dizzy, clumsy or had balance problems?"
<i>ASK IF SYM6=1</i>	SYM6A. Did this occur... 1. Immediately after the injury 2. In the hours or days after the injury, or 3. Both immediately and in the hours or days after the injury?
	SYM7. ADULT OR DIRECT: "Did you have blurred vision, double vision or changes in your vision?" / PROXY: "Did your child have or complain about visual problems such as blurry or double vision?" 1. YES 2. NO
<i>ASK IF SYM7=1</i>	SYM7A. Did this occur... 1. Immediately after the injury 2. In the hours or days after the injury, or 3. Both immediately and in the hours or days after the injury?
	SYM8. Did [you/your child] have trouble concentrating? 1. YES 2. NO
<i>ASK IF SYM8=1</i>	SYM8A. Did this occur.. 1. Immediately after the injury 2. In the hours or days after the injury, or 3. Both immediately and in the hours or days after the injury?

	<p>PRESYM9. The next questions are about things that might happen to people in the hours or days following this kind of injury. Again, we are only interested in things caused by the injury, or made worse by the injury.</p> <p>01. CONTINUE</p>
	<p>SYM9. ADULT: “Did you have difficulty thinking clearly, remembering, or learning new things?” /  PROXY: “Did your child become confused with directions or tasks or answer questions more slowly than usual?” /  DIRECT: “Did you become confused with directions or tasks, or answer questions more slowly than usual?”]</p> <p>1. YES  2. NO</p>
	<p>SYM10. ADULT OR DIRECT: “Were you sensitive to light or noise?” / PROXY: “Was your child sensitive to light or noise?”</p> <p>1. YES  2. NO</p>
<i>ROUND TWO</i>	<p>SYM10. ADULT OR DIRECT: “Were you more sensitive than usual to either light or noise?” /  PROXY: “Was your child more sensitive than usual to either light or noise?”</p>
	<p>SYM11. ADULT OR DIRECT: “Did you experience a change in mood or personality such as irritability, changes in emotional responses, or feeling more bothered by things?” / PROXY “Did your child act more or less emotional than usual, more irritable, or more bothered by things?”</p> <p>1. YES  2. NO</p>
	<p>SYM12. ADULT: “Did you have trouble with sleep? Such as, did you have trouble falling asleep, were you more drowsy than usual, did you get tired easily or more frequently than usual, or did you sleep noticeably more or less than usual?” / PROXY: “Did your child appear</p>

	<p>drowsy, sleep more than usual or appear more tired or fatigued?" / DIRECT: "Did you feel drowsy, sleep more than usual or feel more tired or fatigued?"</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<i>ROUND TWO</i>	<p>ADULT: "Did you have trouble sleeping or were you more tired than usual?" /          PROXY: "Did your child have trouble sleeping or appear more tired?" /          DIRECT: "Did you have trouble sleeping or were you more tired than usual?"</p>
<p><i>CASE DEFINITION: IF THE RESPONDENT ENDORSED AT LEAST ONE SYMPTOM FOR THIS INJURY, <u>GO TO SRRX</u>. IF NOT, AND THERE IS MORE THAN ONE INJURY, <u>GO BACK THROUGH SIGNS/SYMPTOMS FOR THE NEXT INJURY</u>. IF THERE IS NOT AT LEAST ONE SYMPTOM FOR THIS INJURY AND THERE ARE NO MORE INJURIES, <u>GO TO LIFETIME TBI OR CONCUSSION</u></i></p>	
SRR Activity (SRR Incidence)	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT FOR ONE TO THREE INJURIES. IF THERE IS AT LEAST ONE SIGN/SYMPTOM FOR AN INJURY AND THERE IS MORE THAN ONE INJURY, ASK THIS QUESTION DIRECTLY AFTER THE SIGNS/SYMPTOM SECTION FOR EACH INJURY AND THEN RETURN TO SIGNS/SYMPTOMS FOR THE NEXT INJURY.</i></p>	<p>SRRX. Did [you/your child] experience this injury while playing a sport, or while engaged in physical fitness or recreational activity <u>for fun or competition?</u> Please do not include chores performed in or around the house.</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<p><b><u>THE FOLLOWING SECTIONS SHOULD ONLY BE ASKED FOR THE MOST RECENT INJURY</u></b></p>	
Military	
<p><i>ASK IF INTTYPE=ADULT AND THE RESPONDENT WAS IN THE MILITARY DURING THE PAST 12 MONTHS (THIS QUESTION WAS</i></p>	<p>MILX. Did this injury occur during military service?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>

<i>IN THE DEMOGRAPHIC SECTION REMOVED FOR COGNITIVE TESTING)</i>	
<i>ASK IF INTTYPE=ADULT AND MILX=1</i>	MILWHENX. In what setting did your injury occur? Did it occur...? <ol style="list-style-type: none"> <li>1. While deployed to a combat zone</li> <li>2. While deployed to a non-combat zone</li> <li>3. During military training</li> <li>4, While on-duty, but not while deployed or training</li> <li>5. While off-duty, or</li> <li>95. In another setting</li> </ol>
<i>ASK IF INTTYPE=ADULT AND MILX=1</i>	MILBLASTX. Was your injury due to a blast or explosion? <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
Intentionality	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MILBLASTX&lt;&gt;1</i>	INTENTX. Which of the following best describes how the injury happened? Would you say that... <ol style="list-style-type: none"> <li>1. Someone else injured [you/your child] on purpose</li> <li>2. [You/your child] tried to injure [yourself/him or herself]</li> <li>3. It was an accident—no one intended to injure [you/your child], or</li> <li>95. Something else happened?</li> </ol>
Bike	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MILBLASTX&lt;&gt;1 AND SRR = 2</i>	BIKEX. Did [you/your child] experience this injury while on a bicycle or a self-propelled wheeled vehicle? <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<i>ASK IF INTTYPE=ADULT, PROXY,</i>	BIKE1X. How did the injury happen? Was it due to a...

<p><i>OR DIRECT AND BIKEX=1 OR (SRRX=1 AND BIKE)</i></p>	<ol style="list-style-type: none"> <li>1. Collision with a moving motor vehicle</li> <li>2. Collision with another bicycle</li> <li>3. Collision with a person</li> <li>4. Collision with a stationary object</li> <li>5. Fall from bicycle to surface (e.g., road, bike path, etc.), or</li> <li>95. Something else?</li> </ol>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND BIKEX=1 AND SRRX &lt;&gt;1</i></p>	<p>BIKE4X. What was the PRIMARY reason [you were/ your child was] bicycling at the time of the injury? [Were you/Was your child]...</p> <ol style="list-style-type: none"> <li>1. Riding primarily as a means of transportation (e.g., to get to work, to get to school, etc.)</li> <li>2. Riding primarily for recreation, physical fitness, or competition</li> </ol> <p>97. DON'T KNOW</p>
<p>Motor Vehicle</p>	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT ND MILBLASTX&lt;&gt;1 AND BIKEX=2</i></p>	<p>MVX. Did [you/your child] experience this injury while on or in a motorized vehicle, such as a car, bus, motorcycle, dune buggy, or all-terrain vehicle (ATV)?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MV1X=1 OR (SRRX = 1 AND MOTOR VEHICLE)</i></p>	<p>MV3X. What type of vehicle [were you in/was your child in]?</p> <ol style="list-style-type: none"> <li>1. An ATV, off-road vehicle or dune buggy</li> <li>2. A bus or truck</li> <li>3. A car</li> <li>4. A motorcycle or dirt bike</li> <li>5. A personal water craft (i.e., Jet ski, ski doo)</li> <li>6. Other</li> <li>95. Another type of vehicle [ENTER RESPONSE TEXT RANGE=XXXX]</li> </ol>
<p><i>ASK IF INTTYPE=ADULT, PROXY,</i></p>	<p>MV2X. Were [you/your child] wearing a seatbelt at the time of</p>

<p><i>OR DIRECT AND MV3X=1, 2 OR 3</i></p>	<p>the injury?  1. YES  2. NO</p>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MVX=1</i></p>	<p>MV6X. Which of the following best describes how the injury occurred? Did [you/your child] collide with...</p> <ol style="list-style-type: none"> <li>1. Another motor vehicle</li> <li>2. A stationary object</li> <li>3. An animal (e.g. a deer), or</li> <li>95. Something else [ENTER RESPONSE TEXT RANGE=XXXX]</li> </ol>
<p><i>ASK IF INTTYPE=A AND MVX=1 AND SRRX&lt;&gt;1 AND MV3X = 1, 4, OR 5</i></p>	<p>MV7X. Why [were you/was your child] riding or driving at the time of the injury? [Were you/was your child]</p> <ol style="list-style-type: none"> <li>1. Riding or driving as a means of transportation (e.g., to get to work, to get to school, etc.)</li> <li>2. Riding or driving for fun, for pleasure, or for competition</li> </ol>
<p>Other Cause</p>	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND SRRX=2 AND MILBLASTX&lt;&gt;1 AND BIKE = 2 AND MVX = 2</i></p>	<p>CAUSEX. Would you say that the injury occurred because you ...</p> <ol style="list-style-type: none"> <li>1. Fell without being struck or pushed</li> <li>2. Were hit by an object or person, or were pushed against something?</li> <li>95. Something else [ENTER RESPONSE TEXT RANGE=XXXX]</li> </ol>
<p>Falls</p>	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND CAUSEX = 1</i></p>	<p>FALLX. Did [you/ your child] fall...</p> <ol style="list-style-type: none"> <li>1. From the floor or from ground level, like a trip or slip</li> <li>2. Down the stairs</li> <li>3. From a height less than or equal to 10 feet, or</li> </ol>

	4. From a height greater than 10 feet
Location	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT</i>	<p>LOCX Did this injury occur...</p> <ol style="list-style-type: none"> <li>1. At your home</li> <li>2. On a street</li> <li>3. At a school</li> <li>5. Park or recreational area</li> <li>4. At a sports field or complex</li> <li>6. Somewhere else? ENTER TEXT: _____</li> </ol>
<i>ASK IF INTTYPE = ADULT</i>	<p>WORK Were you working for pay when the injury occurred?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
SRR General Cause	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND SRRX=1</i>	<p>CAUSEX2. What <u>initially</u> caused the injury? For example, if two individuals collided, and then made contact with the ground, the initial contact would be with another person. Was the injury initially due to contact with...</p> <ol style="list-style-type: none"> <li>1. Another person</li> <li>2. The ground</li> <li>3. An object that was part of the activity like a ball or a goal</li> <li>4. An object that was not part of the activity like the bleachers or a tree</li> <li>95. Something else [ENTER RESPONSE TEXT RANGE = XXX]</li> </ol>

Still Experiencing S/S	
<i>ASK IF INTTYPE=ADULT, PROXY OR DIRECT</i>	<p>SYMSTILL. [Are you/[Is your child] still experiencing any of the injury-related symptoms that we've talked about?</p> <p>1. YES</p> <p>2. NO</p>
<p><i>ASK IF INTTYPE=ADULT, PROXY OR DIRECT</i></p> <p><i>AND SYMSTILL=2</i></p>	<p>SYMRECA. How long did it take for [you/your child] to recover from all of [your/their] injury-related symptoms?</p> <p>OPEN ENDED</p> <p>XX Days</p> <p>XX Weeks</p> <p>XX Months</p>
<i>ASK IF INTTYPE= PROXY AND</i>	<p>CHILDPRES. Did you ask your child about any of their signs or symptoms during our call?</p> <p>1. YES</p> <p>2. NO</p>
Medical Care Adult or Proxy	<i>ASK IF INTTYPE = ADULT OR PROXY UNLESS OTHERWISE SPECIFIED</i>
	<p>PREMED. We have some questions about medical care [you/your child] may have received because of this injury. First[were you/was your child] examined in doctor's office, clinic, hospital or elsewhere?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DK/NR DON'T KNOW/NOT SURE</p>
<i>ROUND TWO</i>	PREMED. We have some questions about medical care [you/your child] may have received because of this injury. First [were you/was your child] ever examined by a medical professional, a paramedic or an athletic trainer?
<i>ASK IF PREMED=1</i>	<p>EVWHOX. Who first looked at or examined [you/your child] after receiving this injury. ? Was it...</p> <p>1. A nurse</p> <p>2. A doctor</p> <p>3. A psychologist</p>

	<ul style="list-style-type: none"> <li>4. An athletic trainer</li> <li>5. Emergency Medical Services (EMS)</li> <li>95. Someone else [ENTER RESPONSE [TEXT RANGE = XXX]</li> <li>97. DK/NR</li> </ul>
<i>ROUND TWO</i>	EVWHOX. Which of these first examined [you/your child] after this injury? Was it...
<i>ASK PREMED=1</i>	<p>EVTIMEX. How long after the injury [were you/was your child] first evaluated by [see answer to previous question]? Was it...</p> <ul style="list-style-type: none"> <li>1. At the time and place of the injury</li> <li>2. After the time of the injury, but within 24 hours</li> <li>3. Within 1 week</li> <li>4. More than 1 week later</li> </ul>
<i>ASK IF EVTIMEX=2, 3, OR 4</i>	<p>EVWHEREX. Where did the first evaluation take place?</p> <ul style="list-style-type: none"> <li>1. In a doctor's office or clinic</li> <li>2. At a hospital or emergency department</li> <li>95. Or somewhere else [ENTER RESPONSE [TEXT RANGE = XXX]</li> </ul>
<i>ASK IF EVWHEREX=1 OR 95</i>	<p>DOCX. Did the first evaluation take place at...?</p> <ul style="list-style-type: none"> <li>1. [Your/your child's] regular doctor or primary care physician's office</li> <li>2. An urgent care clinic</li> <li>3. A clinic in a pharmacy or grocery store</li> <li>4. A sports medicine clinic</li> <li>5. A concussion clinic, or</li> <li>95. Some other place? [ENTER RESPONSE [TEXT RANGE = XXX]</li> </ul>
<i>ASK IF EVWHEREX=2</i>	<p>HOSPX. Did the first evaluation take place at...?</p> <ul style="list-style-type: none"> <li>1. An emergency room</li> </ul>

	<ol style="list-style-type: none"> <li>2. An outpatient clinic in a hospital</li> <li>3. A sports medicine clinic in a hospital</li> <li>4. An urgent care clinic in a hospital, or</li> <li>5. At another location in a hospital [ENTER RESPONSE [TEXT RANGE = XXX]</li> <li>97. DK/NR</li> </ol>
<i>ASK IF INTTYPE = ADULT</i>	<p>MILCAREX. Did [you/your child] receive any type of health, medical, or rehabilitation care for [your/your child's] injury through the Department of Veteran Affairs? Would you say...</p> <ol style="list-style-type: none"> <li>1. Yes, directly from a VA hospital, clinic or VA program (e.g., Vocational Rehabilitation &amp; Employment program)</li> <li>2. Yes, from a civilian provider/facility, but paid for by VA (e.g., Veterans Choice card, etc.), or</li> <li>3. No</li> </ol>
<i>ASK IF PREMED=1</i>	<p>CAREX. Did you receive care for [your/your child's] injury after the initial examination?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DK/NR DON'T KNOW/NOT SURE</li> </ol>
<i>ASK IF CAREX = 1</i>	<p>CAREAX. Did [you/your child] receive care from [your/your child's] regular doctor or primary care physician?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DK/NR DON'T KNOW/NOT SURE</li> </ol>
<i>ASK IF CAREX = 1</i>	<p>CAREBX. What about an urgent care clinic?  IF NEEDED: "Did [you/your child] receive care from...</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>

<p><i>ASK IF CAREX = 1</i></p>	<p>CARECX. A clinic in a pharmacy or grocery store?  IF NEEDED: "Did [you/your child] receive care from...  1. YES  2. NO</p>
<p><i>ASK IF CAREX = 1</i></p>	<p>CAREDX. A sports medicine clinic?  IF NEEDED: "Did [you/your child] receive care from...  1. YES  2. NO</p>
<p><i>ASK IF CAREX = 1</i></p>	<p>CAREEX. A concussion clinic?  IF NEEDED: "Did [you/your child] receive care from...  1. YES  2. NO</p>
<p><i>ASK IF CAREX = 1</i></p>	<p>CAREFX. A hospital or emergency department?  IF NEEDED: "Did [you/your child] receive care from...  1. YES  2. NO</p>
<p><i>ASK IF PREMED=1</i></p>	<p>TBIDX. Following this injury, did a medical professional diagnose [you/your child] with a concussion or traumatic brain injury?  1. YES  2. NO</p>
<p><i>ASK IF PREMED=2 AND CAREAX THROUGH CAREGX ARE ALL 2, 97 OR 99 [AND IF MILCURR = 1 OR MILEVER=1 AND MILCAREX=3]</i></p>	<p>WHYNOCRX. Sometimes it is very difficult for people to receive the health care that they need or want [for their child]. Please select the primary reason [you/your child] did not receive health care for this injury.  1. You had difficulty paying for it  2. You did not have transportation  3. You could not take time off work</p>

	<p>4. You did not think the injury [to your child] was serious</p>
<p><i>ASK IF WHYNOCRX = 1</i></p>	<p>WHYNOCRAX. Was it difficult to pay for because ...</p> <ol style="list-style-type: none"> <li>1. [You/your child] did not have health insurance</li> <li>2. [You/your child] had insurance, but you could not or did not want to pay the amount you were responsible for</li> <li>3. You did not have authorization from your insurance</li> </ol>
<p><i>ASK IF EVWHEREX=1 OR CAREFX=1</i></p>	<p>HOSPSTAX. Did [you/your child] stay in a hospital overnight or longer because of the injury?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<p><i>ASK IF HOSPSTAX=1</i></p>	<p>HOSPNTTEX. How many nights did [you/your child] stay in the hospital because of the injury?</p> <ol style="list-style-type: none"> <li>1. GAVE ANSWER [ENTER RESPONSE MIX TO MAX DAYS]</li> </ol> <p>9</p> <p>9</p>
<p><i>ASK IF HOSPSTAX=1</i></p>	<p>HOSPTRX. After [you were/your child was] discharged from the hospital, did [you/your child] receive <u>inpatient</u> rehabilitation care from a rehabilitation center or nursing care facility because of this brain injury?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol> <p>9. REFUSED</p>

<p><i>ASK IF PREMED=1</i></p>	<p>RECSERVX. IF HOSPITALIZED: [ After your hospitalization / After your child's hospitalization]  IF NOT HOSPITALIZED: After this injury], did [you/your child] receive services to help get well? Some examples might include physical therapy, speech therapy, vocational rehabilitation, neuropsychological services, or counseling.</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<p>Medical Care Direct</p>	<p><i>ASK IF INTTYPE = DIRECT</i></p>
	<p>DASSESED. Did anyone check you out to see if you were injured?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<p><i>ASK IF DASSESED =1</i></p>	<p>DBYWHOA. Who were you first assessed by?</p> <ol style="list-style-type: none"> <li>1. A school nurse</li> <li>2. An athletic trainer</li> <li>3. A coach</li> <li>4. A parent</li> <li>5. Emergency Medical Services (EMS)</li> <li>6. Your regular doctor or pediatrician</li> <li>7. A specialist (e.g. sports medicine doctor, neurologist)</li> <li>8. Another medical professional, or</li> <li>95. Someone else [ENTER RESPONSE [TEXT RANGE = XXX]</li> <li>97. DK/NR</li> <li>99. REFUSED</li> </ol>
<p><i>ASK IF DASSESED = 1 AND DBYWHOA =2, 3, OR 4</i></p>	<p>DBYWHOB. After you were checked out by [state from previous question response], were you checked out by any of the following people? Please say "yes" or "no" to each one.</p> <ol style="list-style-type: none"> <li>1. Your regular doctor or pediatrician</li> <li>2. A specialist (e.g. sports medicine doctor, neurologist)</li> <li>3. Another medical professional, or</li> <li>95. Someone else [ENTER RESPONSE [TEXT RANGE = XXX]</li> </ol>

	<p>97. DK/NR</p> <p>99. REFUSED</p>
<p><i>ASK IF DASSESSED =2 AND (SRRSET1X=1 OR SRRSET3X=1)</i></p>	<p>PRETELL. Although you were not checked out for your injury, did you tell anyone?</p> <p>1. YES</p> <p>2. NO</p>
<p><i>ASK IF PRETELL = 1 AND (SRRSET1X=1 OR SRRSET3X=1)</i></p>	<p>TELLCOACH. Did you tell a coach?</p> <p>1. YES</p> <p>2. NO</p>
<p><i>ASK IF PRETELL = 1 AND (SRRSET1X=1 OR SRRSET3X=1)</i></p>	<p>TELLTEAM. A Teammate?</p> <p>1. YES</p> <p>2. NO</p>
<p><i>ASK IF PRETELL = 1</i></p>	<p>TELLPARENTS. Your parents?</p> <p>1. YES</p> <p>2. NO</p>
<p><i>ASK IF PRETELL = 1</i></p>	<p>TELLDOCTOR. A doctor?</p> <p>1. YES</p> <p>2. NO</p>
<p><i>ASK IF PRETELL = 1</i></p>	<p>TELLELSE. Someone else?</p> <p>1. YES</p> <p>2. NO</p>

<p><i>ASK IF ALL "TELL" ABOVE = NO</i></p>	<p>NOTELLWHY. Why did you choose not to tell anyone? Was it because you...</p> <p>INTERVIEWER: OPEN ENDED, CODE RESPONSE, SELECT ALL THAT APPLY.</p> <ol style="list-style-type: none"> <li>1. Did not realize you were injured</li> <li>2. Did not think the injury was serious</li> <li>3. Did not want to be removed from your sport</li> <li>95. Some other reason [ENTER RESPONSE [TEXT RANGE = XXX]</li> <li>97. DK/NR</li> </ol>
<p>Child and Adult Return to Play</p>	
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND SRRSET1X=1</i></p>	<p>REMPLOYX. [Were you/was your child] removed from the game, performance, or practice as a result of the injury?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOTSURE</li> </ol>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND REMPLAYX= 1</i></p>	<p>REMWHOX. Who removed [you/your child] from play?</p> <ol style="list-style-type: none"> <li>1. A doctor</li> <li>2. An athletic trainer</li> <li>3. An EMT or EMS</li> <li>4. The Coach</li> <li>5. A Parent</li> <li>6. An official or referee</li> <li>7. You removed [yourself/your child] from play</li> <li>95. Other</li> </ol>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND REMPLAYX = 1</i></p>	<p>RETURNX. [Have you/Has your child] returned to full sports/recreation activity following the injury?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND RETURNX= 1</i></p>	<p>RETWHENX. Did [you/your child] return to full sports/recreation activity in...?</p> <p>OPEN ENDED</p> <p>XX Days</p> <p>XX Weeks</p>

	XX Months
<i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND RETURNX= 1</i>	CLEARED. [Were/was"] [you/your child] child cleared by a doctor to return to play? 1. YES 2. NO
<i>ASK IF CLEARED = 2</i>	RETWHOX. Who made the decision to allow [you/your child] to return to play? 2. An athletic trainer 3. An EMT or EMS 4. A coach 5. A Parent 6. An official or referee 7. You made the decision [IF INTTYPE=P READ "for your child"] to return to activity following the injury 95. Other
<i>ASK IF CLEARED = 1</i>	RETWHOAX. What kind of doctor made the decision for [you/your child] to return to activity? Was it a... 1. A primary care provider 2. A sports medicine physician 3. An emergency department physician 4. A neuropsychologist or neurologist 5. Another type of health care provider [ENTER RESPONSE [TEXT RANGE = XXX]
<i>Child Proxy Return to School</i>	<i>ASK IF INTTYPE = PROXY</i>
	SCHOMISS. Did your child miss any school due to the injury? 1. YES 2. NO
<i>ASK IF SCHOMISS=1</i>	SCHOMISSA. How many days? _____ ENTER RESPONSE [RANGE = 1-XX]

<i>ASK IF SCHOMISS =1</i>	<p>SCHOREC. Did your child's health care provider make any recommendations about how you, school personnel or your child's teachers could help your child return to school?</p> <p>1. YES 2. NO</p>
<i>ASK IF SCHOMISS =1 AND SCHOREC=1</i>	<p>SHAREREC. Were these recommendations shared with the school?</p> <p>1. YES 2. NO</p>
	<p>TEACHTOL. Were your child's teacher(s) told about your child's injury?</p> <p>1. YES 2. NO</p>
	<p>EXTHELP. Did your child receive extra help, support, or services at school due to the injury?</p> <p>1. YES 2. NO</p>
<i>ASK IF EXTHELP=1</i>	<p>RETLNGHT For how long did your child receive this help?</p> <p>OPEN ENDED</p> <p>XX Days XX Weeks XX Months</p>
<i>ASK IF INTTYPE = P</i>	<p>ACPERF. Has your child's grades declined since the injury?</p> <p>1. YES 2. NO</p>
<i>ASK IF ACPERF = 1</i>	<p>ACPERF2. Is the decline in grades due to the injury?</p>

	<ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
<i>ASK IF ACPERF = 2</i>	<p>ACPERF3. Is your child having to work harder for the grades he or she had prior to the injury?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
Adult Return to Work	<i>ASK IF INTTYPE = A</i>
	<p>WKMISX. Did the injury cause you to miss or stop work that you do for pay?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
	<p>HMMISX. Did the injury cause you to miss or stop other responsibilities you have, like taking care of your family or volunteer work?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>
Lifetime TBI or Concussion	<i>ALL RESPONDENTS RECEIVE THIS SECTION, REGARDLESS OF WHETHER THEY HAVE REPORTED A HEAD INJURY IN THE LAST 12 MONTHS</i>
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT</i>	<p>LIFETBIDX. IF THERE WAS AN INJURY IN THE LAST 12 MONTHS: "Other than what you have already reported"</p> <p><u>Thinking across [your/ your child's]" entire life, has a doctor, nurse, or other medical professional ever told [you/ your child] that [you/ he or she] had a concussion or any other type of brain injury caused by a blow to the head?</u></p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>

<i>ASK IF ADULT, PROXY, OR DIRECT AND LIFETBIDX=1</i>	LIFETBIDXN. How many concussions, or other types of brain injury caused by a blow to the head, [have you/has your child] had in [your/his or her] lifetime? ENTER NUMBER [RANGE=MIN-MAX]
<i>ASK IF ADULT, PROXY, OR DIRECT</i>	TBINODX1. A concussion has occurred anytime a blow to the head caused [you/your child] to have symptoms, whether just momentarily or lasting awhile. Symptoms include: blurred or double vision, seeing stars, sensitivity to light or noise, headaches, dizziness or balance problems, nausea, vomiting, trouble sleeping, fatigue, confusion, difficulty remembering, difficulty concentrating, or being knocked out.  IF THERE WAS AN INJURY IN THE LAST 12 MONTHS: "Other than what you have already reported in the last 12 months"  In [your/your child's] lifetime, do you believe that [you have/your child has] ever had a concussion or other type of brain injury other than those diagnosed by a medical professional? 1. YES 2. NO
<i>ASK IF ADULT, PROXY, OR DIRECT AND LIFETBIDX=1</i>	TBINODXN. How many non-diagnosed concussions, or other type of brain injury [have you/has your child] had in [your/his or her] lifetime? ENTER NUMBER [RANGE=MIN-MAX]
<i>ASK IF ADULT, PROXY, OR DIRECT AND LIFETBIDXN + TBINODX1 &gt;= 1</i>	LTSRR. [Was this/Were any of these] concussions experienced while participating in sports or a recreational activity for fun or competition? 1. YES 2. NO
<i>ASK IF INTTYPE = ADULT AND (LIFETBIDX&gt;1 OR TBINODX &gt; 1)</i>	AGETBI. How old were you at the time of [this/the first] brain injury or concussion

	ENTER AGE [RANGE=MIN-MAX]

**Appendix B**

TRAUMATIC BRAIN INJURY SURVEY: Spanish Language Instrument

Inclusion Criteria	Question
<b>PAST 12 MONTHS TBI</b>	
<i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT</i>	<b>RECALL.</b> Estamos interesados en saber cuántas veces en el último año, [“usted /“su hijo”] tuvo una lesión en la cabeza. Esto podría ser debido a un golpe, impacto o sacudida en la cabeza.
<i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT</i>	<p>1. <b>INJ.</b> En el último año, que sería desde [INSERT DATE 1 YEAR AGO FROM TODAY], ¿[“usted”/ “su hijo”] ha ido al médico, a una clínica, a un hospital o ha sido examinado debido a una lesión en la cabeza?</p> <p>1. YES 2. NO 97. DON’T KNOW/NOT SURE 99. REFUSED</p> <p style="text-align: right;">} <b>Skip to PREJOG (3)</b></p>
<i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND INJ =1</i>	<p>2. <b>INJN.</b> En el último año, que sería desde [INSERT DATE 1 YEAR AGO FROM TODAY], ¿cuántas veces [“usted”/ “su hijo”] ha ido al médico, a una clínica o a un hospital o ha sido examinado debido a una lesión en la cabeza?</p> <p>ENTER COUNT: _____</p> <p>97. DON’T KNOW/NOT SURE 99. REFUSED</p>
<i>READ FOR ALL</i>	<p>3. <b>PREJOG.</b> Ahora me gustaría que pensara sobre (IF YES TO TREATED TBI “otras”) ocasiones en los últimos doce meses en las que [“usted “su hijo(a)”] pudo haber sufrido una lesión en la cabeza. Me gustaría que me contara sobre una lesión en la cabeza aunque [“usted”/ “su hijo(a)”] no haya consultado a un médico para obtener atención. Esto podría haber pasado al jugar deportes por diversión o competencia o mientras [ “usted”/ “su hijo(a)”] estaba haciendo alguna actividad física, como andar en bicicleta. Esto podría haber sucedido como consecuencia de un accidente automovilístico o porque alguien [ “le lastimó”/ “lastimó a su hijo(a)”]. O, quizá haya pasado debido a que [ “se tropezó, resbaló o cayó”/ “su hijo(a) se tropezó, resbaló o cayó”].</p>
<i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT</i>	<p>4. <b>INJ2.</b> Aparte de las lesiones sobre las que ya me informé, en los últimos doce meses, es decir, desde [insert date 1 year</p>

Inclusion Criteria	Question
	<p>ago from today], ¿[ “Sufrió” / “Su hijo(a) sufrió”] cualquier otra lesión en la cabeza?</p> <p>1. YES 2. NO 97. DON’T KNOW/NOT SURE 99. REFUSED</p> <p style="text-align: right;">} <b>Skip to PREINTX (6)</b></p>
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND INJ2 =1</i></p>	<p>5. <b>INJN2.</b> En los últimos doce meses, eso es, desde el [insert date 1 year ago from today], ¿cuántas lesiones en la cabeza [“sufrió”/ “sufrió su hijo(a)”], sin contar las [INJN] lesiones que ya mencionó?</p> <p>ENTER COUNT: _____</p> <p>97. DON’T KNOW/NOT SURE 99. REFUSED</p>
<b>TRANSITION</b>	
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND INJN &gt;=1</i></p>	<p>6. <b>PREINTX.</b> Gracias. Ahora tenemos algunas preguntas más sobre la lesión/las lesiones que sufrió [“sufrió su hijo(a)”].</p>
<p><b>INJURY DESCRIPTION IF MORE THAN ONE INJURY; NOTE ONE QUESTION IS REQUIRED EVEN IF THERE IS ONLY ONE INJURY</b></p>	
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND INJN + INJN2 &gt;1</i></p>	<p><i>READ ONLY IF MORE THAN ONE INJURY</i></p> <p>7. <b>PREOPN.</b> Le haré algunas preguntas de seguimiento sobre estas lesiones que sufrió [“su hijo(a)”], y me gustaría poder distinguir [“las dos lesiones” / “las tres lesiones”/ “las tres lesiones más recientes”].</p>
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND INJN + INJN2 &gt;1</i></p>	<p><i>READ ONLY IF MORE THAN ONE INJURY</i></p> <p>8. <b>INJOPN1.</b> Podría describir brevemente qué causó la lesión <u>más grave?</u> [ “de su hijo”]?</p> <p>INTERVIEW: write brief DESCRIPTION</p> <p>01. _____</p> <p>97. DON’T KNOW 99. REFUSED</p>
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND <u>INJN + INJN2 =&gt;1 (NEED MONTH EVEN IF IT IS ONLY ONE</u></i></p>	<p><i>NEED MONTH EVEN IF IT IS ONLY ONE INJURY</i></p> <p>9. <b>MONTH.</b> ¿En qué mes ocurrió la lesión?</p> <p>1. JANUARY 2. FEBRUARY</p>

Inclusion Criteria	Question
<u>INJURY</u>	3. MARCH 4. APRIL 5. MAY 6. JUNE 7. JULY 8. AUGUST 9. SEPTEMBER 10. OCTOBER 11. NOVEMBER 12. DECEMBER 97. DON'T KNOW/NOT SURE 99. REFUSED
<i>REPEAT FOR UP TO THREE INJURIES, THEN MOVE TO SIGNS AND SYMPTOMS</i>	
Signs/Symptoms (Incidence)	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT FOR ONE TO THREE INJURIES. IF THERE IS MORE THAN ONE INJURY, REPEAT THIS SECTION FOR UP TO THREE INJURIES-REFER TO EACH INJURY USING INJOPN1 AND MONTHN TO REMIND THE RESPONDENT WHICH INJURY YOU ARE ASKING ABOUT. COMPLETE SIGNS/SYMPTOMS AND NEXT SECTION FOR ONE INJURY BEFORE MOVING TO THE NEXT INJURY</i>	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND THERE IS MORE THAN ONE INJURY</i>	<i>READ ONLY IF MORE THAN ONE INJURY</i>  10. <b>PRESYMMU.</b> Ahora me gustaría hablar sobre las lesiones que me mencionó. Hablemos sobre la que describió como [INJOPN1] que sucedió en [MONTHN].
	11. <b>PRESYM.</b> En el siguiente conjunto de preguntas, le preguntaré que ["le sucedió"/ "le sucedió a su hijo(a)"] en los minutos después de la lesión. En relación con cada cosa que le lea, por favor dígame si ["le sucedió"/ "le sucedió a su hijo(a)"] o no. Sólo queremos saber las cosas que la lesión causó o agravó.
	12. <b>SYM1.</b> ADULT: "¿Se sintió aturdido(a), atolondrado(a) o confundido(a)?" PROXY: "¿Su hijo(a) parecía estar confundido(a) mentalmente?" DIRECT: "¿Usted se sintió confundido(a) mentalmente?" 1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED

Inclusion Criteria	Question
	<p>13. <b>SYM2.</b> ADULT: “¿Se olvidó de lo que pasó justo antes o después de la lesión?”            PROXY: “¿Su hijo(a) tuvo dificultad para recordar lo que pasó justo antes o después de la lesión?”            DIRECT: “¿Tuvo usted dificultad para recordar lo que pasó justo antes o después de la lesión?”</p> <p>1. YES            2. NO            97. DON'T KNOW/NOT SURE            99. REFUSED</p>
	<p>14. <b>SYM3.</b> ADULT OR DIRECT: “¿Tuvo náuseas o vomitó?”            PROXY: “¿Su hijo(a) se quejó de tener náuseas?”</p> <p>1. YES            2. NO            97. DON'T KNOW/NOT SURE            99. REFUSED</p>

	<p>15. <b>SYM4.</b> ADULT OR DIRECT: “¿Se quedó inconsciente o perdió la conciencia, aunque haya sido brevemente?”/  PROXY: “¿Su hijo(a) se quedó inconsciente o perdió la conciencia, aunque haya sido brevemente?”</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p> <p style="text-align: right;">} <b>Skip to PRESYM5 (17)</b></p>
<i>ASK IF SYM4=1</i>	<p>16. <b>SYM4A.</b> ¿Por cuánto tiempo? ...Fue por</p> <p>1. Unos segundos  2. Más de unos pocos segundos pero menos de 5 minutos  2. 6 a 30 minutos  3. 31 a 59 minutos  4. 1 a 24 horas o  5. Más de 24 horas  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
	<p>17. <b>PRESYM5.</b> Ahora quiero preguntarle sobre cosas que les suceden a algunas personas después de este tipo de lesión. Algunas de estas cosas se presentan inmediatamente después de la lesión y algunas no suceden sino hasta horas o días después de la lesión. De nuevo, sólo queremos saber sobre las cosas que la lesión causó o agravó.</p>
	<p>18. <b>SYM5.</b> ADULT OR DIRECT: “¿Le dio dolor de cabeza?”  PROXY: “¿Su hijo(a) se quejó de dolor de cabeza?”</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p> <p style="text-align: right;">} <b>Skip to SYM6 (20)</b></p>
<i>ASK IF SYM5=1</i>	<p>19. <b>SYM5A.</b> ¿Ocurrió esto ...</p> <p>1. Inmediatamente después de la lesión  2. En las horas o los días después de la lesión o  3. Tanto inmediatamente como en las horas o los días después de la lesión?  97. DON’T KNOW/NOT SURE  99. REFUSED</p>

	<p>20. <b>SYM6.</b> ADULT: ¿Hubo alguna vez un momento en que se sintió mareado(a), torpe o tuvo problemas de equilibrio?”  PROXY “¿Su hijo(a) parecía estar mareado(a) o se quejó de estar mareado(a), parecía moverse en forma torpe o tuvo problemas de equilibrio?”  DIRECT: “¿Ha habido alguna vez un momento en que usted estaba mareado(a), torpe o tuvo problemas de equilibrio?”</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE } <b>Skip to SYM7 (22)</b>  99. REFUSED</p>
<p><i>ASK IF SYM6=1</i></p>	<p>21. <b>SYM6A.</b> ¿Ocurrió esto...</p> <p>1. Inmediatamente después de la lesión  2. En las horas o los días después de la lesión o  3. Tanto inmediatamente como en las horas o los días después de la lesión?  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
	<p>22. <b>SYM7.</b> ADULT OR DIRECT: “Tuvo vista borrosa o doble u otros cambios en la vista?”  PROXY: “¿Su hijo(a) tuvo vista borrosa o doble u otros cambios en la vista?”</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE } <b>Skip to SYM8 (24)</b>  99. REFUSED</p>
<p><i>ASK IF SYM7=1</i></p>	<p>23. <b>SYM7A.</b> ¿Ocurrió esto ...</p> <p>1. Inmediatamente después de la lesión  2. En las horas o los días después de la lesión o  3. Tanto inmediatamente como en las horas o los días después de la lesión?  97. DON’T KNOW/NOT SURE  99. REFUSED</p>

	<p><b>SYM8.</b> ¿[“Usted”/ “Su hijo(a)”] tuvo problemas para concentrarse?1. YES</p> <p>2. NO</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p> <p>} <b>Skip to PRESYM9 (26)</b></p>
<i>ASK IF SYM8=1</i>	<p><b>24. SYM8A.</b> ¿Ocurrió esto ...</p> <p>1. Inmediatamente después de la lesión</p> <p>2. En las horas o los días después de la lesión o</p> <p>3. Tanto inmediatamente como en las horas o los días después de la lesión?</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p>
	<p><b>25. PRESYM9.</b> Las preguntas siguientes tratan sobre cosas que podrían pasarles a las personas durante las horas o los días siguientes a este tipo de lesión. De nuevo, sólo nos interesan las cosas que la lesión causó o agravó.</p>
	<p><b>26. SYM9.</b> ADULT: “¿Tuvo dificultad para pensar claramente, recordar o aprender cosas nuevas?”</p> <p>PROXY: “¿Su hijo(a) se confundía con instrucciones o tareas o contestaba las preguntas más lentamente de lo usual?”</p> <p>DIRECT: “¿Usted se confundía con instrucciones o tareas o contestaba las preguntas más lentamente de lo usual?”</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p>
	<p><b>27. SYM10.</b> ADULT OR DIRECT: “¿Usted se sentía más sensible de lo usual ya sea a la luz o al ruido?”</p> <p>PROXY: “Su hijo(a) se sentía más sensible de lo usual ya sea a la luz o al ruido?”</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p>

	<p>28. <b>SYM11.</b> ADULT OR DIRECT: “¿Tuvo usted un cambio en el estado de ánimo o la personalidad, como irritabilidad o se sentía más emocional de lo usual?”  PROXY “¿Su hijo(a) tuvo un cambio en el estado de ánimo o la personalidad, estaba más irritable o de otra forma estaba más emocional de lo usual?”</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
	<p>29. <b>SYM12.</b> ADULT: “¿Tenía problemas para dormir o estaba más cansado(a) de lo usual?”  PROXY: “¿Su hijo(a) tenía problemas para dormir o parecía estar más cansado(a)?”  DIRECT: “¿Tenía usted más problemas para dormir o se sentía más cansado(a)?”</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<p><i>CASE DEFINITION: IF THE RESPONDENT ENDORSED AT LEAST ONE SYMPTOM FOR THIS INJURY, <u>GO TO SRRX</u>. IF NOT, AND THERE IS MORE THAN ONE INJURY, <u>GO BACK THROUGH SIGNS/SYMPTOMS FOR THE NEXT INJURY</u>. IF THERE IS NOT AT LEAST ONE SYMPTOM FOR THIS INJURY AND THERE ARE NO MORE INJURIES, <u>GO TO LIFETIME TBI OR CONCUSSION (PAGE 23)</u>.</i></p>	
<p>SRR Activity (SRR Incidence)</p>	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT FOR ONE TO THREE INJURIES. IF THERE IS AT LEAST ONE SIGN/SYMPTOM FOR AN INJURY AND THERE IS MORE THAN ONE INJURY, ASK THIS QUESTION DIRECTLY AFTER THE SIGNS/SYMPTOM SECTION FOR EACH INJURY AND THEN RETURN TO</i></p>	<p>30. <b>SRRX.</b> ¿[“Usted”/ “Su hijo(a)”] sufrió esta lesión mientras jugaba un deporte o mientras participaba en condicionamiento físico o una actividad recreativa <u>como diversión o competencia</u>? Por favor, no incluya las tareas realizadas en el hogar o sus alrededores.</p> <ol style="list-style-type: none"> <li>1. YES -----&gt; <b>Skip to LOCX (46)</b></li> <li>2. NO</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>

<i>SIGNS/SYMPTOMS FOR THE NEXT INJURY.</i>	
<b><i>THE FOLLOWING SECTIONS SHOULD ONLY BE ASKED FOR <u>THE MOST RECENT INJURY</u></i></b>	
Military	
<i>ASK IF INTTYPE=ADULT AND THE RESPONDENT WAS IN THE MILITARY DURING THE PAST 12 MONTHS (THIS QUESTION WAS IN THE DEMOGRAPHIC SECTION REMOVED FOR COGNITIVE TESTING)</i>	<p><i>ONLY ASK IF ADULT AND THE RESPONDENT WAS IN THE MILITARY DURING THE PAST 12 MONTHS; OTHERWISE GO TO <b>INTENTX (35)</b></i></p> <p>31. <b>MILX.</b> ¿Esta lesión ocurrió durante el servicio militar?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p> <p style="text-align: right;">} <b>Skip to INTENTX (35)</b></p>
<i>ASK IF INTTYPE=ADULT AND MILX=1</i>	<p>32. <b>MILWHENX.</b> ¿En qué entorno le ocurrió su lesión? ¿Le ocurrió...?</p> <p>1. Mientras estaba desplegado(a) en una zona de combate</p> <p>2. Mientras estaba desplegado(a) en una zona que no era de combate</p> <p>3. Durante el entrenamiento militar</p> <p>4. Durante el servicio, pero no al estar desplegado(a) o en entrenamiento</p> <p>5. Mientras estaba fuera de servicio o</p> <p>95. En otro entorno</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<i>ASK IF INTTYPE=ADULT AND MILX=1</i>	<p>33. <b>MILBLASTX.</b> ¿Su lesión se debió a un estallido o una explosión?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p> <p style="text-align: right;">} <b>Skip to LOCX (46)</b></p>
Intentionality	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MILBLASTX&lt;&gt;1</i>	<p>34. <b>INTENTX.</b> ¿Cuál de las siguientes describe mejor la forma en que sucedió la lesión? ¿Diría usted que...</p> <p>1. Otra persona [ “le lesionó”/ “lesionó a su hijo(a)”] a propósito</p> <p>2. [“Usted”/ “Su hijo(a)”] trató de lesionarse [ “a sí</p>

	<p>mismo(a)"/ "a sí mismo o misma"]</p> <p>3. Fue un accidente —nadie tuvo la intención de [ "lesionarle"/ "lesionar a su hijo(a)"] o</p> <p>95. Sucedió otra cosa?</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
Bike	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MILBLASTX&lt;&gt;1 AND SRRX = 2</i></p>	<p>35. <b>BIKEX.</b> ¿["Usted"/ "Su hijo(a)"] sufrió esta lesión mientras estaba en una bicicleta o vehículo con ruedas autopulsado?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON'T KNOW/NOT SURE } <b>Skip to MVX (39)</b></p> <p>99. REFUSED</p>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND BIKEX=1 OR (SRRX=1 AND BIKE)</i></p>	<p>36. <b>BIKE1X.</b> ¿Cómo sucedió la lesión? ¿Inicialmente fue debido a...</p> <p>1. Una colisión con un vehículo automotor en movimiento</p> <p>2. Una colisión con otra bicicleta</p> <p>3. Una colisión con una persona</p> <p>4. Una colisión con un objeto estacionario</p> <p>5. Una caída de la bicicleta a una superficie, como por ejemplo, el pavimento u</p> <p>95. Otra cosa?</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND BIKEX=1 AND SRRX &lt;&gt;1</i></p>	<p>37. <b>BIKE4X.</b> ¿Cuál era la razón PRINCIPAL por la que ["usted"/ "su hijo(a) estaba"] andando en bicicleta cuando sufrió la lesión? [ "[¿Estaba usted"/ "¿Estaba su hijo(a)"]...</p> <p>1. Andando en bicicleta principalmente como método de transporte (por ejemplo, para ir al trabajo o la escuela)</p> <p>2. Andando en bicicleta principalmente como recreación, condicionamiento físico o competencia</p> <p>97. DON'T KNOW</p> <p>99. REFUSED</p> <p><b>ALL GO TO LOCATION (PAGE 11)</b></p>

Motor Vehicle	
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MILBLASTX&lt;&gt;1 AND BIKEX=2</i></p>	<p>38. <b>MVX.</b> ¿[“Usted”/ “¿Su hijo(a)”] sufrió esta lesión mientras estaba en un vehículo motorizado, como en un automóvil, autobús, camión, motocicleta, buggy de dunas o un vehículo todoterreno (all terrain vehicle; ATV)?</p> <p>1. YES 2. NO 97. DON’T KNOW/NOT SURE 99. REFUSED</p> <p>} <b>Skip to CAUSEX (44)</b></p>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MV1X=1 OR (SRRX = 1 AND MOTOR VEHICLE)</i></p>	<p>39. <b>MV3X.</b> ¿En qué tipo de vehículo [“estaba usted” / “estaba su hijo(a)”]?</p> <p>1. Un vehículo todoterreno, para fuera de caminos o buggy para dunas 2. Un autobús, camión o camioneta 3. Un automóvil 4. Una motocicleta o moto de cross 5. Una moto acuática, como jet ski [ski doo] u 6. Otro tipo de vehículo 95. Another type of vehicle [ENTER RESPONSE TEXT RANGE=XXXX]_____</p> <p>97. DON’T KNOW/NOT SURE 99. REFUSED</p>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MV3X=1, 2 OR 3</i></p>	<p><i>ASK ONLY IF MV3X (40) = 1, 2 OR 3</i></p> <p>40. <b>MV2X.</b> ¿Tenía [ “usted”/ “su hijo(a)”] puesto el cinturón de seguridad cuando ocurrió la lesión?</p> <p>1. YES 2. NO 97. DON’T KNOW/NOT SURE 99. REFUSED</p>
<p><i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND MVX=1</i></p>	<p>41. <b>MV6X.</b> ¿Cuál de las siguientes describe mejor la forma en que ocurrió la lesión? ¿[“Usted”/ “Su hijo(a)”] chocó con...</p> <p>1. Otro vehículo automotor 2. Un objeto estacionario 3. Un animal, como un venado, u 95. Otra cosa [ENTER RESPONSE TEXT RANGE=XXXX]_____</p> <p>97. DON’T KNOW/NOT SURE 99. REFUSED</p>

<i>ASK IF INTTYPE=A AND MVX=1 AND SRRX&lt;&gt;1 AND MV3X = 1, 4, OR 5</i>	<p>42. <b>MV7X.</b> ¿Por qué estaba [“usted”/ “su hijo(a)”] trasladándose o conduciendo cuando ocurrió la lesión? [“¿Estaba usted”/ “¿Estaba su hijo(a)”]</p> <ol style="list-style-type: none"> <li>1. Trasladándose o conduciendo como método de transporte, por ejemplo, para ir al trabajo o la escuela</li> <li>2. Trasladándose o conduciendo para divertirse, por placer o en competencia</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol> <p><b>ALL GO TO LOCATION (PAGE 11)</b></p>
Other Cause	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND SRRX=2 AND MILBLASTX&lt;&gt;1 AND BIKE = 2 AND MVX = 2</i>	<p>43. <b>CAUSEX.</b> ¿Diría que la lesión sucedió porque usted/ su hijo(a)...</p> <ol style="list-style-type: none"> <li>3. Se cayó sin que le pegaran o empujaran</li> <li>4. Sufrió un golpe de un objeto o persona o fue empujado(a) contra algo o</li> <li>95. Ocurrió otra cosa [ENTER RESPONSE TEXT RANGE=XXXX]_____</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
Falls	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND CAUSEX = 1</i>	<p><i>ASK ONLY IF CAUSEX (44) = 1</i></p> <p>44. <b>FALLX.</b> ¿[“Usted”/ “Su hijo(a)”] se cayó...</p> <ol style="list-style-type: none"> <li>1. Al estar en el piso o nivel del suelo, como un resbalón o tropiezo</li> <li>2. Hacia abajo por las escaleras</li> <li>3. Desde una altura de 10 pies o menos o</li> <li>4. Desde una altura de más de 10 pies</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
Location	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT</i>	<p>45. <b>LOCX.</b> ¿Esta lesión ocurrió...</p> <ol style="list-style-type: none"> <li>1. En su hogar</li> <li>2. En una calle</li> </ol>

	<p>3. En la escuela</p> <p>5. En un parque o área recreativa</p> <p>4. En un campo o complejo deportivo o</p> <p>6. En otro lugar? ENTER TEXT:</p> <p>_____</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<i>ASK IF INTTYPE = ADULT</i>	<p><i>ASK IF INTTYPE = ADULT</i></p> <p>46. <b>WORK.</b> ¿Estaba usted trabajando por pago cuando ocurrió la lesión?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<b>SRR General Cause</b>	
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT AND SRRX=1</i>	<p><i>ASK ONLY IF SRRX (31, PAGE 7) = 1</i></p> <p>47. <b>CAUSEX2.</b> ¿Qué causó la lesión <u>inicialmente</u>? Por ejemplo, si dos personas chocaron y después una hizo contacto con el suelo, el contacto inicial habría sido con otra persona. ¿La lesión inicialmente se debió al contacto con...</p> <p>1. Otra persona</p> <p>2. El suelo</p> <p>3. Un objeto que era parte de la actividad, como un balón o una meta</p> <p>4. Un objeto que no era parte de la actividad, como las gradas o un árbol u</p> <p>95. Otra cosa [ENTER RESPONSE TEXT RANGE = XXX]</p> <p>_____</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<b>Still Experiencing S/S</b>	
<i>ASK IF INTTYPE=ADULT, PROXY OR DIRECT</i>	<p>48. <b>SYMSTILL.</b> [“¿Usted”/ “¿Su hijo(a)”] todavía tiene alguno de los síntomas relacionados con la lesión sobre la que hemos estado hablando?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON'T KNOW/NOT SURE</p>

	99. REFUSED
ASK IF INTTYPE=ADULT, PROXY OR DIRECT AND SYMSTILL=2	ASK ONLY IF SYMSTILL (49) = 2  49. <b>SYMRECA.</b> ¿Cuánto tiempo le llevó [ “a usted” / “a su hijo(a)”] recuperarse de todos sus síntomas relacionados con la lesión? OPEN ENDED ___ Days ___ Weeks ___ Months
ASK IF INTTYPE= PROXY AND	50. <b>CHILDPRES.</b> ¿Le preguntó a su hijo(a) sobre cualquiera de sus signos o síntomas durante nuestra llamada? 1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED
Medical Care Adult or Proxy ASK IF INTTYPE = ADULT OR PROXY UNLESS OTHERWISE SPECIFIED	
	51. <b>PREMED.</b> Tenemos algunas preguntas sobre la atención médica que [ “usted”/ “su hijo(a)”] recibió debido a esta lesión. Primero, [¿alguna vez le ha examinado”/ “¿alguna vez su hijo(a)”] ha sido examinado(a) por] un profesional médico, un paramédico o un entrenador atlético? 1. YES 2. NO 97. DK/NR DON'T KNOW/NOT SURE } <b>Skip to WHYNOCRX(67)</b> 99. REFUSED
ASK IF PREMED=1	52. <b>EVWHOX.</b> ¿Quién fue la primera persona que [IF INTTYPE=A READ “le examinó”/ IF INTTYPE=P READ “examinó a su hijo(a)”] después de esta lesión? ¿Fue... 1. Un integrante de enfermería 2. Un médico 3. Un paramédico, o 4. Un entrenador atlético 95. Otro profesional médico 97. DK/NR 99. REFUSED

<i>ASK IF PREMED=1</i>	<p>53. <b>EVTIMEX.</b> ¿Cuánto tiempo después de la lesión el [INSERT EVWHOX] [“le evaluó”/ “evaluó a su hijo(a)”] por primera vez? ¿Fue...</p> <ol style="list-style-type: none"> <li>1. En el momento y lugar en que ocurrió la lesión</li> <li>2. Después de cuando ocurrió la lesión, pero dentro de las siguientes 24 horas</li> <li>3. Antes de que pasara una semana</li> <li>4. Más de una semana después</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<i>ASK IF EVTIMEX=2, 3, OR 4</i>	<p><i>ASK ONLY IF EVTIMEX (54) =2, 3, OR 4</i></p> <p>54. <b>EVWHEREX.</b> ¿En dónde se realizó la primera evaluación?</p> <ol style="list-style-type: none"> <li>1. En un consultorio médico o clínica</li> <li>2. En un hospital o departamento de emergencia o</li> <li>95. En otro lugar [ENTER RESPONSE [TEXT RANGE = XXX] _____</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<i>ASK IF EVWHEREX=1 OR 95</i>	<p><i>ASK IF EVWHEREX (55) =1 OR 95</i></p> <p>55. <b>DOCX.</b> ¿La primera evaluación se realizó en...?</p> <ol style="list-style-type: none"> <li>1. El consultorio del médico regular o de atención primaria [“suyo”/ “de su hijo(a)”]</li> <li>2. Una clínica de atención urgente</li> <li>3. Una clínica en una farmacia o supermercado</li> <li>4. Una clínica de medicina de deportes</li> <li>5. Una clínica de atención a conmociones cerebrales o</li> <li>95. Algún otro lugar? [ENTER RESPONSE [TEXT RANGE = XXX]_____</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<i>ASK IF EVWHEREX=2</i>	<p><i>ASK IF EVWHEREX (55) =2</i></p> <p>56. <b>HOSPX.</b> ¿La primera evaluación se realizó en...?</p> <ol style="list-style-type: none"> <li>1. Una sala de emergencia</li> <li>2. Una clínica para pacientes en consulta externa de un hospital</li> </ol>

	<p>3. Una clínica de medicina de deportes en un hospital</p> <p>4. Una clínica de atención urgente en un hospital o</p> <p>5. En otro sitio en un hospital [ENTER RESPONSE [TEXT RANGE = XXX] _____</p> <p>97. DK/NR</p> <p>99. REFUSED</p>
<i>ASK IF INTTYPE = ADULT</i>	<p><i>ASK IF INTTYPE = ADULT</i></p> <p>57. <b>MILCAREX.</b> ¿Usted recibió algún tipo de atención médica, de salud o rehabilitación por la lesión mediante el Departamento de Asuntos de Veteranos? ¿Diría...</p> <p>1. Sí, directo de un hospital de veteranos o programa o clínica de veteranos (e.j., rehabilitación vocacional y programa de empleo)</p> <p>2. Sí, de un proveedor o establecimiento civil, pero pagado por el Departamento de Asuntos de Veteranos (e.j., tarjeta <i>Choice</i>, etc.), o</p> <p>3. No</p> <p>97. DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<i>ASK IF PREMED=1</i>	<p>58. <b>CAREX.</b> ¿[ "Usted"/ "Su hijo(a)"] recibió atención para ["su"/ "su"] lesión después del examen inicial?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DK/NR DON'T KNOW/NOT SURE } <b>Skip to TBIDX</b></p> <p>99. REFUSED</p>
<i>ASK IF CAREX = 1</i>	<p>59. <b>CAREAX.</b> ¿[ "Usted"/ "Su hijo(a)"] recibió atención [ "de su médico regular o médico de atención primaria"/ "del médico regular o médico de atención primaria de su hijo(a)"]?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DK/NR DON'T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<i>ASK IF CAREX = 1</i>	<p>60. <b>CAREBX.</b> ¿Qué pasó en relación con <u>una clínica de atención urgente</u>?</p> <p>IF NEEDED: "¿["Usted"/ "Su hijo(a)"] recibió atención de...</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON'T KNOW/NOT SURE</p>

	99. REFUSED
<i>ASK IF CAREX = 1</i>	<p>61. <b>CARECX.</b> ¿Una clínica en una farmacia o supermercado?  IF NEEDED: “¿[“Usted”/ “Su hijo(a)”] recibió atención de...</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
<i>ASK IF CAREX = 1</i>	<p>62. <b>CAREDX.</b> ¿Una clínica de medicina del deporte?  IF NEEDED: “¿[ “Usted”/ “Su hijo(a)”] recibió atención de...</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
<i>ASK IF CAREX = 1</i>	<p>63. <b>CAREEX.</b> ¿Una clínica de atención a conmociones cerebrales?  IF NEEDED: “¿[“Usted”/ “Su hijo(a)”] recibió atención de...</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
<i>ASK IF CAREX = 1</i>	<p>64. <b>CAREFX.</b> ¿Un hospital o departamento de emergencias?  IF NEEDED: “¿[“Usted”/ “Su hijo(a)”] recibió atención de...</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
<i>ASK IF PREMED=1</i>	<p>65. <b>TBIDX.</b> Después de esta lesión, el profesional médico le dio a [“usted”/ “su hijo”] un diagnóstico de conmoción cerebral o lesión traumática cerebral?</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p> <p><i>ALL GO TO INSTRUCTIONS BEFORE HOSPSTAX (69)</i></p>
<i>ASK IF PREMED=2 AND CAREAX THROUGH CAREGX</i>	<p>66. <b>WHYNOCRX.</b> En ocasiones, es muy difícil para las personas recibir la atención de salud que necesitan o desean [ “para</p>

<p><i>ARE ALL 2, 97 OR 99 [AND IF MILCURR = 1 OR MILEVER=1 AND MILCAREX=3]</i></p>	<p>su hijo(a)”. Por favor, seleccione la razón principal de que [ “usted”/ “su hijo(a)”] no haya recibido atención de la salud para esta lesión.</p> <ol style="list-style-type: none"> <li>2. Tuvo dificultad para pagar por ella</li> <li>2. No tuvo transporte</li> <li>3. No pudo obtener tiempo libre del trabajo</li> <li>4. No pensó que la lesión [ “de su hijo(a)”] fuera seria</li> <li>95. OTRA [ENTER RESPONSE [TEXT RANGE = XXX]]</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<p><i>ASK IF WHYNOCRX = 1</i></p>	<p><i>ASK IF WHYNOCRX (67) =1 ; OTHERWISE GO TO DASSESSED (73)</i></p> <p><b>67. WHYNOCRAX.</b> ¿Fue difícil pagar porque...</p> <ol style="list-style-type: none"> <li>3. [ “Usted”/ “Su hijo(a)”] no tenía seguro de salud</li> <li>4. [ “Usted”/ “Su hijo(a)”] tenía seguro, pero no podía o no quería pagar el monto que era su responsabilidad</li> <li>3. Su seguro no le dio la autorización</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol> <p><i>ALL GO TO DASSESSED (73)</i></p>
<p><i>ASK IF EVWHEREX=1 OR CAREFX=1</i></p>	<p><i>ASK IF EVWHEREX (55, PAGE 13) =1 OR CAREFX (65, PAGE 15) =1; OTHERWISE SKIP TO RECSERVX (72)</i></p> <p><b>68. HOSPSTAX.</b> ¿[“Usted”/ “Su hijo(a)”] se quedó en el hospital durante una noche o más tiempo debido a la lesión?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON’T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol> <p style="text-align: right;"><b>Skip to RECSERVX (72)</b></p>
<p><i>ASK IF HOSPSTAX=1</i></p>	<p><b>69. HOSPNITEX.</b> ¿Cuántas noches [ “usted”/ “su hijo(a)”] se quedó en el hospital debido a la lesión?</p> <p>1. GAVE ANSWER [ENTER RESPONSE MIX TO MAX DAYS]</p> <hr style="width: 20%; margin-left: 0;"/> <ol style="list-style-type: none"> <li>997. DON’T KNOW/NOT SURE</li> <li>999. REFUSED</li> </ol>
<p><i>ASK IF HOSPSTAX=1</i></p>	<p><b>70. HOSPTRX.</b> Después de que [ “se le dio de alta”/ “se dio de alta a su hijo(a)”] del hospital, ¿[ “Usted”/ “Su hijo(a)”]</p>

	<p>recibió atención de rehabilitación <u>como paciente hospitalizado</u> de un centro de rehabilitación o instalaciones de atención de enfermería debido a esta lesión cerebral?</p> <p>1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED</p>
<i>ASK IF PREMED=1</i>	<p>71. <b>RECSERVX.</b> ["Después de su hospitalización" / "Después de la hospitalización de su hijo(a)" // "Después de esta lesión], ¿["Usted"/ "Su hijo(a)"] recibió servicios para recuperar la salud? Algunos ejemplos podrían incluir la fisioterapia, la terapia del habla, la rehabilitación vocacional, servicios neuropsicológicos o asesoramiento.</p> <p>1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED</p>
Medical Care Direct	<i>ASK ONLY IF INTTYPE = DIRECT</i>
	<p>72. <b>DASSESED.</b> ¿Alguien le revisó para ver si estaba lesionado(a)?</p> <p>1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED</p> <p>} <b>Skip to PRETELL (76)</b></p>
<i>ASK IF DASSESED =1</i>	<p>73. <b>DBYWHOA.</b> ¿Quién le valoró primero?</p> <p>1. Personal de enfermería de la escuela 2. Entrenador de atletismo 3. Un entrenador 4. Padre o madre 5. Servicios Médicos de Emergencia (Emergency Medical Services; EMS) 6. Su médico regular o pediatra 7. Un especialista, como médico de medicina del deporte o neurólogo 8. Otro profesional médico u 95. Otra persona [ENTER RESPONSE [TEXT RANGE = XXX] 97. DK/NR 99. REFUSED</p>
<i>ASK IF DASSESED = 1 AND</i>	<i>ASK IF DBYWHOA (74) = 2, 3, OR 4 OTHERWISE SKIP TO LIFETIME</i>

<p><i>DBYWHOA =2, 3, OR 4</i></p>	<p><b>TBI OR CONCUSSION (PAGE 23)</b></p> <p>74. <b>DBYWHOB.</b> ¿Después de que [INSERT TEXT ANSWER FROM DBYWHOA] le revisó, ¿cualquiera de las personas siguientes le revisaron? Por favor, diga “sí” o “no” para cada una.</p> <ol style="list-style-type: none"> <li>1. Su médico regular o pediatra</li> <li>2. Un especialista, como médico de medicina del deporte o neurólogo</li> <li>3. Otro profesional médico u</li> <li>95. Otra persona [ENTER RESPONSE [TEXT RANGE = XXX]</li> </ol> <hr/> <ol style="list-style-type: none"> <li>97. DK/NR</li> <li>99. REFUSED</li> </ol> <p><b>SKIP TO LIFETIME TBI OR CONCUSSION (PAGE 23)</b></p>
<p><i>ASK IF DASSESSED =2 AND (SRRSET1X=1 OR SRRSET3X=1)</i></p>	<p>75. <b>PRETELL.</b> Aunque nadie le revisó su lesión, ¿le dijo a alguien?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE } <b>Skip to NOTELLWHY (82)</b></li> <li>99. REFUSED</li> </ol>
<p><i>ASK IF PRETELL = 1 AND (SRRSET1X=1 OR SRRSET3X=1)</i></p>	<p>76. <b>TELLCOACH.</b> ¿Le dijo a un entrenador?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<p><i>ASK IF PRETELL = 1 AND (SRRSET1X=1 OR SRRSET3X=1)</i></p>	<p>77. <b>TELLTEAM.</b> ¿A un compañero de equipo?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<p><i>ASK IF PRETELL = 1</i></p>	<p>78. <b>TELLPARENTS.</b> ¿A sus padres?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>

<p><i>ASK IF PRETELL = 1</i></p>	<p><b>79. TELLDOCTOR.</b> ¿A un médico?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
<p><i>ASK IF PRETELL = 1</i></p>	<p><b>80. TELLELSE.</b> ¿A otra persona?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol> <p><i>GO TO INSTRUCTIONS BEFORE REMPLAYX (83)</i></p>
<p><i>ASK IF ALL "TELL" ABOVE = NO</i></p>	<p><b>81. NOTELLWHY.</b> ¿POR QUÉ DECIDIÓ NO DECIRLE A NADIE? ¿FUE PORQUE USTED...INTERVIEWER: OPEN ENDED, CODE RESPONSE, SELECT ALL THAT APPLY.</p> <ol style="list-style-type: none"> <li>4. No se dio cuenta que estaba lesionado(a)</li> <li>5. No pensó que la lesión fuera seria</li> <li>6. No quería que le retiraran de su deporte</li> <li>95. Alguna otra razón [ENTER RESPONSE [TEXT RANGE = XXX]</li> </ol> <hr/> <ol style="list-style-type: none"> <li>97. DK/NR</li> <li>99. REFUSED</li> </ol>
<p><i>Child and Adult Return to Play</i></p>	<p><i>ASK IF (INTTYPE = PROXY OR ADULT (AGE 18-21) AND SRRX (31) =1</i></p>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE =18-21) AND SRRX (31) =1</i></p>	<p><b>82. REMPLAYX.</b> [ "¿Le retiraron"/ "¿Retiraron a su hijo(a)"] del juego, la presentación o la práctica como resultado de la lesión?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOTSURE</li> <li>99. REFUSED</li> </ol> <p style="text-align: right;"><b>Skip to CHILD PROXY RETURN TO SCHOOL</b></p>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND REMPLAYX= 1</i></p>	<p><b>83. REMWHOX.</b> ¿Quién [ "le retiró"/ "retiró a su hijo(a)"] del juego?</p> <ol style="list-style-type: none"> <li>1. Un médico</li> <li>2. Un entrenador atlético</li> <li>3. Un integrante de EMT o EMS</li> <li>4. El entrenador</li> <li>5. Padre o madre</li> <li>6. Un oficial o árbitro</li> </ol>

	<p>7. Usted [ “se retiró a sí mismo(a)”/ “retiró a su hijo(a)”] del juego o</p> <p>95. Fue otra persona?</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND REMPLAYX = 1</i></p>	<p>84. <b>RETURNX.</b> [“¿Usted ha/ “¿Su hijo(a) ha”] regresado por completo a los deportes o a la actividad recreativa después de la lesión?</p> <p>1. YES</p> <p>2. NO</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p> <p style="text-align: right;">} <b>Skip to CHILD PROXY RETURN TO SCHOOL SECTION</b></p>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND RETURNX= 1</i></p>	<p>85. <b>RETWHENX.</b> [Su hijo] volvió a la actividad de recreación de deportes completo en... OPEN ENDED</p> <p>_____ Days</p> <p>_____ Weeks</p> <p>_____ Months</p>
<p><i>ASK IF (INTTYPE = PROXY OR INTYPE =ADULT AND AGE1 =18-21) AND RETURNX= 1</i></p>	<p>86. <b>CLEARED.</b> [“¿Usted”/ “¿Su hijo(a)”] recibió de un médico la autorización para regresar a jugar?</p> <p>1. YES -----&gt; <b>Skip to RETWHOAX (89)</b></p> <p>2. NO</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p>
<p><i>ASK IF CLEARED = 2</i></p>	<p>87. <b>RETWHOX.</b> ¿Quién tomó la decisión de [ “dejarle”/ “dejar que su hijo(a)”] regresara al juego?</p> <p>2. Un entrenador atlético</p> <p>3. Personal de EMT o EMS</p> <p>4. Un entrenador</p> <p>5. Padre o madre</p> <p>6. Un oficial o árbitro</p> <p>7. Usted tomó la decisión [ “de que su hijo(a)”] regresara a la actividad después de la lesión o</p> <p>95. Fue otra persona?</p> <p>97. DON’T KNOW/NOT SURE</p> <p>99. REFUSED</p> <p><b>skip to Child Proxy Return to School Section</b></p>

<p><i>ASK IF CLEARED = 1</i></p>	<p>88. <b>RETWHOAX.</b> ¿Qué tipo de médico tomó la decisión de que [“usted”/ “su hijo”] regresara a la actividad Fue un...</p> <ol style="list-style-type: none"> <li>1. Médico de cabecera</li> <li>2. Médico especializado en deportes</li> <li>3. Un médico de la sala de urgencias</li> <li>4. Un médico especializado en neurología, como neuropsicólogo o neurólogo</li> <li>5. Otro tipo de proveedor de atención médica [ENTER RESPONSE [TEXT RANGE = XXX]</li> </ol> <p>97. DON'T KNOW/NOT SURE 99. REFUSED</p>
<p>Child Proxy Return to School</p>	<p><i>ASK IF INTTYPE = PROXY</i></p>
	<p>89. <b>SCHOMISS.</b> ¿Su hijo(a) faltó a algo de clases debido a la lesión?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol> <p style="text-align: right;">} <b>Skip to TEACHTOL (94)</b></p>
<p><i>ASK IF SCHOMISS=1</i></p>	<p>90. <b>SCHOMISSA.</b> ¿Cuántos días? _____ ENTER RESPONSE [RANGE = 1-XX]</p> <p>97. DON'T KNOW/NOT SURE 99. REFUSED</p>
<p><i>ASK IF SCHOMISS =1</i></p>	<p>91. <b>SCHOREC.</b> ¿El proveedor de atención de la salud de su hijo(a) le hizo recomendaciones sobre la forma en que usted, el personal escolar o los maestros de su hijo(a) podrían ayudarle a que él o ella regresara a la escuela?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol> <p style="text-align: right;">} <b>Skip to TEACHTOL (94)</b></p>
<p><i>ASK IF SCHOMISS =1 AND SCHOREC=1</i></p>	<p>92. <b>SHAREREC.</b> ¿Estas recomendaciones se compartieron con la escuela?</p> <ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> <li>97. DON'T KNOW/NOT SURE</li> <li>99. REFUSED</li> </ol>
	<p>93. <b>TEACHTOL.</b> ¿Se informó al (los) maestro(s) de su hijo(a) sobre la lesión que él o ella sufrió?</p>

	<p>1. YES  2. NO  97. DON'T KNOW/NOT SURE  99. REFUSED</p>
	<p>94. <b>EXTHELP.</b> ¿Su hijo(a) recibió ayuda, apoyo o servicios adicionales en la escuela debido a la lesión?  1. YES  2. NO  97. DON'T KNOW/NOT SURE  99. REFUSED</p> <p style="text-align: right;">} <b>Skip to ACPERF (97)</b></p>
<i>ASK IF EXTHELP=1</i>	<p>95. <b>RETLNGHT.</b> ¿Por cuánto tiempo recibió su hijo esta ayuda?  OPEN ENDED  ___ Days  ___ Weeks  ___ Months</p>
<i>ASK IF INTTYPE = P</i>	<p>96. <b>ACPERF.</b> ¿Las calificaciones de su hijo(a) han bajado desde la lesión?  1. YES  2. NO  97. DON'T KNOW/NOT SURE  99. REFUSED</p> <p style="text-align: right;">} <b>Skip to ACPERF3 (99)</b></p>
<i>ASK IF ACPERF = 1</i>	<p>97. <b>ACPERF2.</b> ¿Esta baja en las calificaciones se debe a la lesión?  1. YES  2. NO  97. DON'T KNOW/NOT SURE  99. REFUSED</p> <p><i>SKIP TO LIFETBIDX (102)</i></p>
<i>ASK IF ACPERF = 2</i>	<p>98. <b>ACPERF3.</b> ¿Su hijo(a) tiene que esforzarse más para obtener las mismas calificaciones que sacaba antes de la lesión?  1. YES  2. NO  97. DON'T KNOW/NOT SURE  99. REFUSED</p> <p><i>SKIP TO LIFETBIDX (102)</i></p>

Adult Return to Work	<i>ASK IF INTTYPE = ADULT</i>
	<p>99. <b>WKMISSX.</b> La lesión le causó que faltara al trabajo o que dejara de desempeñar el trabajo que hace por pago?</p> <p>1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED</p>
	<p>100. <b>HMMISSX.</b> ¿La lesión le causó que desatendiera o abandonara otras responsabilidades que tiene, como atender a su familia o hacer trabajo voluntario?</p> <p>1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED</p>
Lifetime TBI or Concussion	<i>ALL RESPONDENTS RECEIVE THIS SECTION, REGARDLESS OF WHETHER THEY HAVE REPORTED A HEAD INJURY IN THE LAST 12 MONTHS</i>
<i>ASK IF INTTYPE=ADULT, PROXY, OR DIRECT</i>	<p>101. <b>LIFETBIDX.</b> IF THERE WAS AN INJURY IN THE LAST 12 MONTHS: “Además de lo que ya nos ha notificado,”</p> <p><u>Piense en [ “su vida entera” / “la vida entera de su hijo”], alguna vez un medico, enfermero u otro profesional médico le dijo que [ “usted” / “su hijo”] sufrió una conmoción cerebral o cualquier otro tipo de lesión cerebral causada por un golpe en la cabeza?</u></p> <p>1. YES 2. NO 97. DON'T KNOW/NOT SURE 99. REFUSED</p> <p style="text-align: right;">} <b>Skip to TBINODX1 (104)</b></p>
<i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND LIFETBIDX=1</i>	<p>102. <b>LIFETBIDXN.</b> ¿Cuántas conmociones cerebrales u otro tipo de lesión cerebral causado por un golpe en la cabeza, [“ha tenido usted” / “ha tenido su hijo”] [ “en toda su vida” / “en toda la vida de él o ella”]</p> <p>ENTER NUMBER [RANGE=MIN-MAX] _____</p>
<i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT</i>	<p>103. <b>TBINODX1.</b> Una conmoción cerebral ha ocurrido en cualquier momento en que un golpe en la cabeza haya causado que [“usted” / “su hijo(a)”] tuviera síntomas, ya sea momentáneamente o que hayan durado por un tiempo. Los síntomas incluyen: vista borrosa o doble, ver estrellas,</p>

	<p>sensibilidad a la luz o al ruido, dolores de cabeza, mareos o problemas de equilibrio, náuseas, vómitos, dificultad para dormir, fatiga, confusión, dificultades de memoria, dificultades para concentrarse o pérdida del conocimiento.</p> <p>IF THERE WAS AN INJURY IN THE LAST 12 MONTHS:  “Aparte de lo que ya informó sobre los últimos 12 meses”</p> <p>Durante [“su vida” / “la vida de su hijo(a)”], ¿considera que [“usted” / “su hijo(a)”] alguna vez ha tenido una conmoción cerebral u otro tipo de lesión cerebral aparte de las que le diagnosticó un profesional médico?</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p> <p style="text-align: right;">} <b>End interview</b></p>
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND LIFETBIDX=1</i></p>	<p>104. <b>TBINODXN.</b> ¿Cuántas conmociones cerebrales no diagnosticadas, u otro tipo de lesión cerebral ha tenido [“usted” / “su hijo(a)”] durante toda [IF INTTYPE=A OR D READ “su” / IF INTTYPE=P READ “su”] vida?  ENTER NUMBER [RANGE=MIN-MAX] _____</p>
<p><i>ASK IF INTTYPE = ADULT, PROXY, OR DIRECT AND LIFETBIDXN + TBINODX1 &gt;= 1</i></p>	<p>105. <b>LTSRR.</b> “¿Sufrió esta conmoción cerebral”/“¿Sufrió algunas de estas conmociones cerebrales” mientras participaba en deportes o una actividad recreativa por diversión o competencia?</p> <p>1. YES  2. NO  97. DON’T KNOW/NOT SURE  99. REFUSED</p>
<p><i>ASK IF INTTYPE = ADULT AND (LIFETBIDX&gt;1 OR TBINODX &gt; 1)</i></p>	<p><i>ASK IF INTTYPE = ADULT</i></p> <p>106. <b>AGETBI.</b> ¿Qué edad tenía cuando sufrió [ “esta” // “la primera”] lesión o conmoción cerebral?  ENTER AGE [RANGE=MIN-MAX] _____</p>