Variable Number	Variable Name	Variable Type	Variable Length	Variable Label
1	SITE	Numeric	8	Masked Site identifier
2	CaseID	Character	7	Masked Case Identifier
3	ControlType	Character	4	case/control type
4	StudySubjectID	Character	7	StudySubjectID
5	injurydate	Numeric	8	Date of injury
6	InjuryDateND	Numeric	8	Date of injury not documented
7	InjuryTime	Character	5	Time of injury
8	InjuryTimeND	Numeric	8	Time of injury not documented
9	EstimateTimeInjury	Character	1	Estimated time of injury if exact time not documented
10	ICD9MechInjury1	Character	6	ICD-9 E-codes for mechanism of injury (1)
11	ICD9MechInjury2	Character	6	ICD-9 E-codes for mechanism of injury (2)
12	ICD9MechInjury3	Character	6	ICD-9 E-codes for mechanism of injury (3)
13	ICD9Location1	Character	6	ICD-9 E-codes for location of injury(1)
14	ICD9Location2	Character	6	ICD-9 E-codes for location of injury(2)
15	ICD9Location3	Character	6	ICD-9 E-codes for location of injury(3)
16	InjuryPrimaryMechanism	Character	2	Primary Mechanism of Injury
17	InjuryPrimaryMechanismtxt	Character	156	Primary Mechanism of Injury Text
18	MVCREC	Numeric	8	Motor Vehicle Collision: Type of collision - Rear end collision
19	MVCHOC	Numeric	8	Motor Vehicle Collision: Type of collision - Head on collision
20	MVCSI	Numeric	8	Motor Vehicle Collision: Type of collision - Side Impact
21	MVCRO	Numeric	8	Motor Vehicle Collision: Type of collision - Rollover
22	MVCEFA	Numeric	8	Motor Vehicle Collision: Type of collision - Ejected from automobile
23	MVCDSC	Numeric	8	Motor Vehicle Collision: Type of collision - Death in the same collision
24	MVCSpeed	Numeric	8	Motor Vehicle Collision: Speed of patients vehicle
25	PassRestraint	Numeric	8	Motor Vehicle Collision: Was a passenger restraint system used?
26	OMTSpeed	Numeric	8	Other Motorized Transport Crash: Speed of patients vehicle
27	Assault	Numeric	8	Blunt injury: Assault?
28	ChildAbuse	Numeric	8	Blunt injury: Suspected or confirmed child abuse?
29	ShakenBabySyndrome	Numeric	8	Blunt injury: Shaken baby syndrome?
30	FallFromElevation	Numeric	8	Fall from elevation: Estimated height in feet
31	FallDownStairs	Numeric	8	Fall down stairs: Estimated number of stairs
32	clotheslining	Character	2	Was the injury a result of an object striking the neck?
33	helmet	Character	2	Was the child wearing protective helmet?
34	HeadFirst	Character	2	Was the impact head first striking against the ground or other solid object OR did a heavy object strike directly on top of the head?
35	HeadFirstRegion	Character	2	If yes, indicate the region of the head that was struck

Date of injury				
injurydate	Frequency	Percent		
	59	1.78		
03/02/1999	1	0.03		
08/12/1999	1	0.03		
09/17/1999	1	0.03		
10/15/1999	1	0.03		
11/01/1999	1	0.03		
11/17/1999	1	0.03		
12/12/1999	2	0.06		
12/15/1999	1	0.03		
12/16/1999	1	0.03		
12/20/1999	1	0.03		
12/22/1999	1	0.03		
12/23/1999	2	0.06		
12/25/1999	6	0.18		
12/26/1999	7	0.21		
12/27/1999	5	0.15		
12/28/1999	10	0.30		
12/29/1999	18	0.54		
12/30/1999	35	1.06		
12/31/1999	279	8.42		
01/01/2000	2881	86.93		

Date of injury not documented				
InjuryDateND Frequency Percent				
0	3255	98.22		
1	59	1.78		

The FREQ Procedure

Time of injury				
InjuryTime Frequency Percen				
	2250	67.89		
00:00	1	0.03		
00:05	1	0.03		

0.03

32.02

1061

00:29

remainder not printed here

Time of injury not documented			
InjuryTimeND Frequency Percen			
0	1064	32.11	
1	2250	67.89	

Estimated time of injury if exact time not documented				
EstimateTimeInjury	Frequency	Percent		
	1062	32.05		
1	38	1.15		
2	63	1.90		
3	231	6.97		
4	537	16.20		
5	655	19.76		
6	244	7.36		
U	484	14.60		

ICD-9 E-codes for mechanism of injury (1)				
ICD9MechInjury1	Frequency	Percent		
	968	29.21		
E810.1	3	0.09		
E811.1	1	0.03		
E812	1	0.03		
E812.0	7	0.21		
E812.1	320	9.66		
E812.2	2	0.06		
E812.3	1	0.03		
E812.6	3	0.09		
E812.7	3	0.09		
E812.9	2	0.06		
E813.0	1	0.03		
E813.1	17	0.51		
E813.6	66	1.99		
E813.7	2	0.06		
E813.8	2	0.06		
E814.0	1	0.03		
E814.1	5	0.15		
E814.6	12	0.36		
E814.7	202	6.10		
E814.9	1	0.03		
E815.0	1	0.03		
E815.1	37	1.12		
E815.2	1	0.03		
E815.6	2	0.06		
E815.7	1	0.03		
E816.0	12	0.36		
E816.1	77	2.32		
E816.2	6	0.18		
E816.3	1	0.03		
E816.6	1	0.03		

ICD-9 E-codes for mechanism of injury (1)				
ICD9MechInjury1	Frequency	Percent		
E816.9	1	0.03		
E817.1	4	0.12		
E817.7	1	0.03		
E818.1	12	0.36		
E818.7	4	0.12		
E818.8	4	0.12		
E818.9	2	0.06		
E819.0	2	0.06		
E819.1	79	2.38		
E819.2	1	0.03		
E819.6	10	0.30		
E819.7	22	0.66		
E819.9	4	0.12		
E820.0	2	0.06		
E821.0	24	0.72		
E821.1	6	0.18		
E821.2	10	0.30		
E821.7	3	0.09		
E821.8	3	0.09		
E822.7	3	0.09		
E823.0	2	0.06		
E823.1	3	0.09		
E823.7	1	0.03		
E825.1	1	0.03		
E825.2	3	0.09		
E825.7	9	0.27		
E825.8	1	0.03		
E826.1	80	2.41		
E826.8	4	0.12		
E826.9	1	0.03		
E828.2	21	0.63		

ICD-9 E-codes for mechanism of injury (1)				
ICD9MechInjury1	Frequency	Percent		
E829.8	1	0.03		
E831.8	1	0.03		
E838.3	1	0.03		
E838.8	1	0.03		
E846.0	1	0.03		
E846.1	1	0.03		
E847	1	0.03		
E848	6	0.18		
E849.0	3	0.09		
E849.3	1	0.03		
E849.4	2	0.06		
E860	1	0.03		
E861.1	1	0.03		
E866.0	1	0.03		
E878.1	2	0.06		
E878.8	1	0.03		
E879.6	1	0.03		
E880.0	1	0.03		
E880.1	1	0.03		
E880.9	63	1.90		
E881.0	5	0.15		
E882	48	1.45		
E882.0	8	0.24		
E883.0	27	0.81		
E883.9	1	0.03		
E884	2	0.06		
E884.0	56	1.69		
E884.1	1	0.03		
E884.2	12	0.36		
E884.3	1	0.03		
E884.4	31	0.94		

ICD-9 E-codes for mechanism of injury (1)				
ICD9MechInjury1	Frequency	Percent		
E884.5	14	0.42		
E884.6	1	0.03		
E884.9	112	3.38		
E885	5	0.15		
E885.0	4	0.12		
E885.1	4	0.12		
E885.2	6	0.18		
E885.3	8	0.24		
E885.4	13	0.39		
E885.9	38	1.15		
E886.0	31	0.94		
E886.9	7	0.21		
E887	1	0.03		
E888	16	0.48		
E888.0	3	0.09		
E888.1	9	0.27		
E888.8	21	0.63		
E888.9	30	0.91		
E890.2	1	0.03		
E890.9	1	0.03		
E906.0	5	0.15		
E906.8	5	0.15		
E906.9	1	0.03		
E908.3	1	0.03		
E910.2	3	0.09		
E910.4	1	0.03		
E910.8	6	0.18		
E911	1	0.03		
E913.8	3	0.09		
E913.9	1	0.03		
E916	16	0.48		

ICD-9 E-codes for mechanism of injury (1)				
ICD9MechInjury1	Frequency	Percent		
E916.0	3	0.09		
E917	1	0.03		
E917.0	116	3.50		
E917.4	5	0.15		
E917.5	25	0.75		
E917.6	1	0.03		
E917.7	1	0.03		
E917.8	7	0.21		
E917.9	61	1.84		
E918	3	0.09		
E919.0	1	0.03		
E919.8	2	0.06		
E920.8	1	0.03		
E924.2	1	0.03		
E925.9	1	0.03		
E927	26	0.78		
E927.0	5	0.15		
E928.8	7	0.21		
E928.9	15	0.45		
E929.3	3	0.09		
E932.0	1	0.03		
E940.8	1	0.03		
E953.0	2	0.06		
E957.0	1	0.03		
E960.0	22	0.66		
E967.0	5	0.15		
E967.1	2	0.06		
E967.2	1	0.03		
E967.9	3	0.09		
E968.2	10	0.30		
E968.5	2	0.06		

ICD-9 E-codes for mechanism of injury (1)				
ICD9MechInjury1	Frequency	Percent		
E968.8	4	0.12		
E968.9	6	0.18		
E975	1	0.03		
E982.9	1	0.03		
E984.0	1	0.03		
E987.0	1	0.03		
E987.9	1	0.03		
E988.9	1	0.03		
e811.1	1	0.03		
e812.1	26	0.78		
e812.6	2	0.06		
e813.1	6	0.18		
e813.6	5	0.15		
e814.4	1	0.03		
e814.7	23	0.69		
e815.1	7	0.21		
e816.1	6	0.18		
e818.1	2	0.06		
e818.7	1	0.03		
e819.0	1	0.03		
e819.1	11	0.33		
e819.2	1	0.03		
e821.0	1	0.03		
e821.2	2	0.06		
e821.8	1	0.03		
e825.1	1	0.03		
e825.8	1	0.03		
e826.1	9	0.27		
e848.0	1	0.03		
e849.0	1	0.03		
e878.1	1	0.03		

ICD-9 E-codes for mechanism of injury (1)		
ICD9MechInjury1	Frequency	Percent
e880.9	5	0.15
e882	9	0.27
e882.0	2	0.06
e884.0	5	0.15
e884.2	1	0.03
e884.4	6	0.18
e884.5	1	0.03
e884.9	21	0.63
e885.0	1	0.03
e885.2	3	0.09
e885.4	1	0.03
e885.9	7	0.21
e888	2	0.06
e888.1	1	0.03
e888.8	3	0.09
e888.9	2	0.06
e910.2	1	0.03
e916	3	0.09
e916.0	1	0.03
e917.0	9	0.27
e917.5	7	0.21
e917.8	1	0.03
e917.9	5	0.15
e919.6	1	0.03
e927	2	0.06
e927.0	1	0.03
e928.8	1	0.03
e928.9	1	0.03
e930.8	1	0.03
e960	3	0.09
e960.0	5	0.15

ICD-9 E-codes for mechanism of injury (1)		
ICD9MechInjury1	Frequency	Percent
e967	1	0.03
e967.2	1	0.03
e967.9	1	0.03
e968.2	2	0.06
e968.8	1	0.03
e968.9	1	0.03

ICD-9 E-codes for mechanism of injury (2)		
ICD9MechInjury2	Frequency	Percent
	3240	97.77
E812.0	1	0.03
E812.1	2	0.06
E813.6	1	0.03
E815.1	3	0.09
E816.2	1	0.03
E819.1	1	0.03
E819.7	1	0.03
E819.9	1	0.03
E826.1	1	0.03
E848	3	0.09
E849.0	2	0.06
E849.4	4	0.12
E849.5	4	0.12
E849.8	2	0.06
E870.8	1	0.03
E873.6	1	0.03
E878.1	1	0.03
E878.2	1	0.03
E878.8	2	0.06
E879.8	1	0.03
E882	1	0.03
E883.0	1	0.03
E884.0	2	0.06
E884.2	1	0.03
E884.4	1	0.03
E885.1	1	0.03
E885.2	1	0.03
E885.9	2	0.06
E888.1	2	0.06
E888.9	1	0.03

ICD-9 E-codes for mechanism of injury (2)		
ICD9MechInjury2	Frequency	Percent
E890.8	1	0.03
E904.0	1	0.03
E910.8	2	0.06
E916	2	0.06
E917.0	1	0.03
E917.9	1	0.03
E925.9	1	0.03
E927	1	0.03
E929.0	1	0.03
E930.8	1	0.03
E937.9	1	0.03
E938.3	1	0.03
E960.0	1	0.03
E967.0	1	0.03
E967.2	1	0.03
E967.9	1	0.03
E968.9	1	0.03
e815.2	1	0.03
e825.8	1	0.03
e849.4	1	0.03
e917.4	1	0.03
e929.0	1	0.03
e935.2	1	0.03
e960.1	1	0.03
e968.7	1	0.03

ICD-9 E-codes for mechanism of injury (3)		
ICD9MechInjury3	Frequency	Percent
	3308	99.82
E821.7	1	0.03
E879.8	1	0.03
E885.4	1	0.03
E938.4	1	0.03
E968.7	1	0.03
e935.9	1	0.03

ICD-9 E-codes for location of injury(1)		
ICD9Location1	Frequency	Percent
	1839	55.49
E849.0	282	8.51
E849.1	3	0.09
E849.2	1	0.03
E849.3	4	0.12
E849.4	215	6.49
E849.5	451	13.61
E849.6	93	2.81
E849.7	6	0.18
E849.8	91	2.75
E849.9	237	7.15
e849.0	16	0.48
e849.4	12	0.36
e849.5	30	0.91
e849.6	9	0.27
e849.8	10	0.30
e849.9	15	0.45

ICD-9 E-codes for location of injury(2)		
ICD9Location2	Frequency	Percent
	3304	99.70
E849.0	2	0.06
E849.5	3	0.09
E849.7	3	0.09
E849.8	1	0.03
E849.9	1	0.03

ICD-9 E-codes for location of injury(3)		
ICD9Location3	Frequency	Percent
	3313	99.97
E849.7	1	0.03

Primary Mechanism of Injury		
InjuryPrimaryMechanism	Frequency	Percent
1	894	26.98
10	104	3.14
11	188	5.67
12	43	1.30
13	5	0.15
14	146	4.41
2	103	3.11
20	44	1.33
3	149	4.50
4	138	4.16
5	17	0.51
6	334	10.08
7	208	6.28
8	412	12.43
9	528	15.93
ND	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
	2659	80.24
'While running hard he abducted his shoulder abruptly and felt popping.'	1	0.03
'brother threw pt. against bed.'	1	0.03
'collided heads' while playing football.	1	0.03
'dirtbike'	1	0.03
'fighting w/ bro & he pulled his neck forward & to right & left'	1	0.03
'helmet-to-helmet football tackling collision'	1	0.03
'hit in face with soccer ball from about 2 feet away'	1	0.03
'hit playing football'	1	0.03
'kneed in the head during football'	1	0.03
'picked up and thrown to the ground'	1	0.03
'playing football and ran into the coach with shoulder, complaint of right shoulder injury'	1	0.03
'playing football' 'c/o taking a helmet to the back/neck area'	1	0.03
'spearing type injury in football where he bent his neck forward'	1	0.03
'swinging purse around her neck'	1	0.03
'tackled in football'	1	0.03
'wheel came off ferriswheel motor and hit pt in head'	1	0.03
'wrestling with another child'	1	0.03
3 yo cousin sat/jumped on pt's neck while playing	1	0.03
4 wheeler	1	0.03
4 wheeler, rollover	1	0.03
4-5 Kids fell on him while playing basketball	1	0.03
A large shelf fell two feet onto her head	1	0.03
ATV	18	0.54
ATV collided with motor bike	1	0.03
ATV rollover	1	0.03
ATV rollover accident	1	0.03
ATV rollover pinned against tree	1	0.03
ATV struck hay bale at 25-30mph	1	0.03
ATV-rollover	1	0.03
Abuse	1	0.03
Assault	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
Attacked by dog	1	0.03
Aunt flipped child around in air several times.	1	0.03
BASEBALL	2	0.06
BASKETBALL	1	0.03
Baseball	2	0.06
Basketball	3	0.09
Basketball - hit in neck with ball	1	0.03
Basketball head to head collision	1	0.03
Basketball player hit in head with subsequent fall	1	0.03
Bending down stretching and felt pull in neck	1	0.03
Brother pulled tight turtleneck over her head	1	0.03
Burn injury	1	0.03
Bus stopped suddenly	1	0.03
CHEERLEADING	1	0.03
Collision with another while snow tubing	1	0.03
Dog Mauling	1	0.03
Dog bite left neck	1	0.03
Dog bite/scratch	1	0.03
Doing flips and fell	1	0.03
Doing sit-ups at school	1	0.03
Dropped on head in jujitsu class	1	0.03
Drowning	1	0.03
FALL OFF A HORSE WHILE GALLOPING	1	0.03
FB collision with another child; struck head on floor	1	0.03
FB head to head	1	0.03
FB player had facemask pulled/twisted by another player	1	0.03
FELL WHILE ROLLERBLADING	1	0.03
FOOTBALL	6	0.18
FOOTBALL HIT	1	0.03
FOOTBALL TACKLE	1	0.03
FOOTBALL:RAN INTO ANOTHER PLAYER	1	0.03
Fall down a slidepatient tumbled down a large slide at the state fair	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
Fall during basketball game, while shooting	1	0.03
Fall during layup - landed on back	1	0.03
Fall during skiing	1	0.03
Fall during sports (rollerskating)	1	0.03
Fall from golf cart	1	0.03
Fall from horse	3	0.09
Fall from horse (4 foot fall)	1	0.03
Fall from roof of parked vehicle (upon gear shift)	1	0.03
Fall into drainage culvert and submersion	1	0.03
Fall off a trampoline	1	0.03
Fall off horse	1	0.03
Fall while skating, tripped and hit side of head	1	0.03
Fall while skiing	1	0.03
Fall while snowboarding	3	0.09
Fell from football tackle.	1	0.03
Fell off a horse while galloping	1	0.03
Fell off motorbike, then hit be another ATV landing from a jump	1	0.03
Fell while snowboarding	1	0.03
Fell, hit head in soccergame.	1	0.03
Flipped by cousin onto head	1	0.03
Football	16	0.48
Football collision	1	0.03
Football helmet to helmet	1	0.03
Football helmet to helmet and fall	2	0.06
Football helmet vs right side of neck	1	0.03
Football injury	3	0.09
Football injury - ran head-on into another player's belly and then fell	1	0.03
Football tackle	3	0.09
Football tackle, hyperextension of neck	1	0.03
Football tackled from behind	1	0.03
Football, fell on pavement, hit head.	1	0.03
Football, helmet vs ground	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
Football-collided with another player	2	0.06
Football-tackled and fell	1	0.03
Found face down in pool. Unwitnessed.	1	0.03
Go Kart	1	0.03
HIT BY A ROCK SLIDE AND KNOCKED DOWN	1	0.03
High jump	1	0.03
Hit by motocross bike	1	0.03
Hit in face with thrown bat	1	0.03
Hit in head with soccer ball	1	0.03
Hit in head/eye during basketball and fell to floor	1	0.03
Hit left temporal area on roof of car while attempting to get in	1	0.03
Hockey	2	0.06
Hockey - checked in to the boards	1	0.03
Hockey injury	1	0.03
Hockey injury-stick to head	1	0.03
Hockey, cross checked into the boards.	1	0.03
Hockey,hit on the back of head	1	0.03
Hockey-checked into boards	1	0.03
Jetski	1	0.03
Jumping on trampoline, fell, hit head, neck	1	0.03
Jumping on trampoline, landed on neck	1	0.03
Kick to head during soccer	1	0.03
Kicked by a horse	1	0.03
Kicked in head by horse	1	0.03
Kicked in the left jaw by a horse	1	0.03
Lacrosse	1	0.03
Lifted neck and heard neck snap	1	0.03
Lifting another child on his shoulder and fell on the ground	1	0.03
MOI unknown	1	0.03
MOTORCYCLE	1	0.03
Making football tackle	1	0.03
Mauled by dogs	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
Moped	2	0.06
Mother swinging child in circles by arms, soon after activity the child began crying and holding neck	1	0.03
Motocross	2	0.06
Motorbike	1	0.03
Motorcycle	2	0.06
Motorized Scooter	1	0.03
Motorized bike	1	0.03
Near drowning	4	0.12
Non-accidental trauma, blunt traume to abdomen	1	0.03
Off-road motorbike	1	0.03
On trampoline mat-fell from sit	1	0.03
Patient doing gymnastics and she landed on her head.	1	0.03
Patient hit from the side while playing football.	1	0.03
Pedestrian hit by bicycle	1	0.03
Player fell on head	1	0.03
Playing Football	1	0.03
Playing Football, hit in the chest landing on his back	1	0.03
Playing basketball, collided with another player with his head. He had a hyperextension injury of his neck.	1	0.03
Playing football	2	0.06
Playing football, grabbed by the face mask, kind of fell to the ground and did a head plant into the ground	1	0.03
Playing tackle football	1	0.03
Playing with brother	1	0.03
Pt doing backflip and twisted neck	1	0.03
Pt was choked by another child (grabbed from behind)	1	0.03
Pt was playing dodgeball; while laying on the ground, another child landed on top of him. The second child's knee struck the patient in the back of the neck	1	0.03
Pt was struck by a softball in back of head while attempting to steal second base	1	0.03
Pt. slid head first into baseman's leg, w/hyperextension	1	0.03
Pushed while doing a head stand	1	0.03
Putting on a shirt heard a pop in neck	1	0.03
Queen size mattress and box spring fell on her	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
Ran into Dad while snow skiing	1	0.03
Rear ended while on ATV	1	0.03
Riding a horse and fell off	1	0.03
Rodeo - bucked off bull and then stepped on	1	0.03
SOCCER	4	0.12
Sitting on trampoline started crying. No know fall or contact	1	0.03
Skated into wall while playing hockey	1	0.03
Skier vs Skier collision	1	0.03
Skiing accident	1	0.03
Slid off a slide and hit her front teeth.	1	0.03
Snow Boarding Fall	1	0.03
Snowboarding fall	1	0.03
Snowboarding, found down	1	0.03
Snowboarding- collided with skier	1	0.03
Snowmobile	1	0.03
Soccer	1	0.03
Soccer ball to neck	1	0.03
Soccer injury	1	0.03
Soccer injury. Kicking ball landed on head (front) heard 'pop' neck and back pain.	1	0.03
Soccer-collision and fall	1	0.03
Standing on head when sibling fell into her and patient fell over	1	0.03
Struck by object (dodgeball)	1	0.03
Stuck by person during cheerleeding practice	1	0.03
Tackled during football game and fell on shoulder	1	0.03
This child pulled over a television set onto her head	1	0.03
Thrown and trampled by bull	1	0.03
Thrown from ATV	1	0.03
Thrown from horse	2	0.06
Tumbling in gym class	1	0.03
Tv stand fell on pt	1	0.03
Unclear. Kicked in butt then neck pain. Also 'wrestling' with siblings.	1	0.03
Unknown, accident nos	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
Unwitnessed fall off trampoline	1	0.03
Unwitnessed. Jumping on bed.	1	0.03
VOLLEYBALL	1	0.03
WRESTLING	1	0.03
WRESTLING BROTHER AT HOME	1	0.03
Went up for a rebound in basketball, fell backwards, hitting head on hardwood floor.	1	0.03
Wrestling	5	0.15
Wrestling at school	1	0.03
Wrestling with brothers	1	0.03
Wrestling with friends	1	0.03
Wrestling, picked up and dropped on head and hyperflex of neck.	1	0.03
Wrestling, rotated neck and hyperextended	1	0.03
Wrestling-landed on his head/neck.	1	0.03
another cheerleader fell on top of her	1	0.03
another child fell on head while swimming in pool	1	0.03
another child jumped about 4 ft. from playground equipment landing on patient's neck and back	1	0.03
assault	1	0.03
assault at school	1	0.03
assault by group of other kids	1	0.03
atv	1	0.03
back flip landing on head and neck	1	0.03
baseball	2	0.06
baseball during gym - hit in face by flying bat	1	0.03
basketball	9	0.27
basketball injury	1	0.03
boogie boarding	1	0.03
bottom of football pile up, helmet jammed into neck	1	0.03
brother 'bearhugged' pt about neck	1	0.03
butted head against another players head playing soccer	1	0.03
cannonball jump into pool	1	0.03
checked into boards in hockey game	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
checked into the boards during hockey game	1	0.03
checked into the boards while playing hockey, fell down on head/face	1	0.03
cheerleader fell onto pts chest causing her to fall	1	0.03
cheerleading	2	0.06
cheerleading injury, another person fell on her neck while attempting a pyramid	1	0.03
child was doing a somersault at home and immediately felt pain in right neck and shoulder	1	0.03
collided with another football player, top of pts head went into other players leg	1	0.03
collided with another player in softball	1	0.03
collided with another player playing football	1	0.03
collision during lacrosse game-patient's head bent forward, collided into another player's body-neck compredded, no flexion or extension.	1	0.03
collision while playing ball game	1	0.03
collision with another basketball player followed by fall to ground	1	0.03
collision with other player during football game	1	0.03
crowd surfer fell on her at a concert	1	0.03
crushed between a stationary and rotating wall on school stage	1	0.03
diving for basketball during game, hit head on bleachers	1	0.03
doing backward somersault and felt neck pop	1	0.03
dresser fell on child	1	0.03
dropped on head/back during wrestling match	1	0.03
drowning	1	0.03
fall doing handstand during kung fu class	1	0.03
fall during basketball game	1	0.03
fall during gymnastics	1	0.03
fall during snowboarding	1	0.03
fall during sporting event; pt was thrown during judo and landed on head	1	0.03
fall from gym equipment	1	0.03
fall from hood of car	1	0.03
fall from horse	1	0.03
fall from horse while riding	1	0.03
fall from skiing	1	0.03
fall from snowboard	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
fall off uneven bars during gymnastics	1	0.03
fall on trampoline	2	0.06
fall onto head while doing a 'backflip' on playground	1	0.03
fall out of car, run over by rear wheel	1	0.03
fall playing ice hockey	1	0.03
fall while being pulled on innertube by boat	1	0.03
fall while doing flip in backyard	1	0.03
fall while ice skating	1	0.03
fall while playing soccer	1	0.03
fall while rollerblading	1	0.03
fall while skiing	1	0.03
fall while skiing after crashed into by snowboarder	1	0.03
fall while snowboarding	4	0.12
fee during cheerleading	1	0.03
fell 3 feet from monkey bars; struck neck against a bar on the way down	1	0.03
fell from snowboard	1	0.03
fell from the hood of a moving car (20 mile/hour)	1	0.03
fell off a horse, was dragged and stepped on/kicked by horse	1	0.03
fell on neck after somersaulting on trampoline	1	0.03
fell on trampoline	1	0.03
fell or jumped off bull while riding and was then stepped on by the bull	1	0.03
fell playing basketball	1	0.03
fell playing football	1	0.03
fell while attempting front flip on trampoline	1	0.03
fell while playing basketball	2	0.06
fell while playing soccer	1	0.03
fell while rollerblading	1	0.03
fell while trying to get on moving vehicle	1	0.03
fell/pulled to ground by shirt landing on shoulder	1	0.03
field hockey	1	0.03
fooling around with brother, fell and hit head on floor	1	0.03
foot ball injury	2	0.06

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
football	31	0.94
football - collided with another player	1	0.03
football - face mask pulleddown, then snapped back	1	0.03
football - hit, went down on head and neck	1	0.03
football - knocked to ground and helmet pushed into ground	1	0.03
football blocking exercise	1	0.03
football collision	2	0.06
football collision + fall	1	0.03
football helmet to helmet collision	1	0.03
football injury	6	0.18
football injury - another player grabbed his helmet and flipped him over	1	0.03
football injury- collided with another player	1	0.03
football tackle	2	0.06
football, collision head to head with other player	1	0.03
football, head on collision	1	0.03
football, helmet vs helmet	1	0.03
football, hemet vs helmet	1	0.03
football, struck head while tackling	1	0.03
football- collision with other players	1	0.03
football; collision with other players	1	0.03
forward flip on trampoline	1	0.03
fotball tackle, landed on head	1	0.03
go cart	1	0.03
go kart into wall	1	0.03
golf cart rollover	1	0.03
gymnastics	2	0.06
gymnastics backflip onto head and neck	1	0.03
head collision with another player	1	0.03
head hit by another player - soccer	1	0.03
helmet to helmet	1	0.03
helmet to helmet during football game	1	0.03
helmet to helmet football collision	2	0.06

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
helmet-helmet collision in football	1	0.03
helmeted, spear-tackled another football player	1	0.03
high jump injury	1	0.03
hit by baseball	1	0.03
hit head on water slide	1	0.03
hit head while playing basketball	1	0.03
hit heads playing lacrosse	1	0.03
hit ifn the face with a softball	1	0.03
hit in L temple w/softball	1	0.03
hit in chest with soccer ball, fell to ground with seizure like activity	1	0.03
hit in head with a pillow during a pillow fight	1	0.03
hit in head with baseball	1	0.03
hit on back playing football	1	0.03
hockey	12	0.36
hockey - checked	1	0.03
hockey - checked into boards	2	0.06
hockey - fall into rink	1	0.03
hockey - player prone on ice, other player fell on his back	1	0.03
hockey - slid head first into boards	1	0.03
hockey accident	1	0.03
hockey collision	2	0.06
hockey injury	1	0.03
hockey player slid face-first into boards, causing hyperflexion of neck	1	0.03
hockey, head first into boards	1	0.03
house fire	1	0.03
ice hockey	4	0.12
jet ski vs. boat	1	0.03
jumped from playground structure and bounced off large ball and hit back of head	1	0.03
jumped on sofa from standing and turned head quickly to look at brother	1	0.03
jumped out of moving car	1	0.03
jumping, landed on feet, heard neck 'pop'	1	0.03
kicked by horse	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
kicked in face by horse	1	0.03
kicked in the face by horse	1	0.03
knocked down during hockey game	1	0.03
knocked out after tackle to ground during football	1	0.03
lacrosse - checked under chin	1	0.03
lacrosse collision with other player	1	0.03
legs forced behind head	1	0.03
loading ATV onto ramp, rolled back onto patient	1	0.03
lost balance and fell during basketball game	1	0.03
moped	1	0.03
moto cross	1	0.03
motocross	4	0.12
motocross bike	1	0.03
motocross crash	2	0.06
motor bike	1	0.03
motor scooter	1	0.03
motorcycle	8	0.24
motorcycle (dirt bike)	1	0.03
motorcycle collision	1	0.03
near drowning	2	0.06
near drowning, unknown if traumatic	1	0.03
neck injury sustained doing handstand	1	0.03
non-organized sport injury- wrestling with brother	1	0.03
on slide	1	0.03
opening gift with teeth and neck snapped back	1	0.03
patient collided with another player during soccer	1	0.03
patient crossed skis and fell forward striking head	1	0.03
patient riding skateboard and holding on to the back of a moving car when car swerved and patient fell	1	0.03
patient was holding onto a conduit while wading in a stream and suddenly went limp and fell into the stream. Possible electrocution followed by drowning	1	0.03
patient was playing hockey, was checked by another player into the boards, struck n=board head-first	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
patient with +ETOH found unconscious with unknown mechanism	1	0.03
pillow fight	1	0.03
pinned face down underneath a pull away 'hideabed'. According to the mother, the hide-a-bed struck him in the back of the neck.	1	0.03
pinned up against stage by crowd at concert	1	0.03
played football hit another football (head-butted) player.	1	0.03
playing basketball, head vs wall	1	0.03
playing football and was tackled	1	0.03
playing football in a tackling drill, that he fell backwards and hyperextended neck	1	0.03
playing football was tackled	1	0.03
playing football, dove for the ball striking head and neck against the floor	1	0.03
playing football, flipped over and landed head first on field, pt. states heard a 'crack'	1	0.03
playing football, head to head (helmet) collision w/ another player.	1	0.03
playing football, helmet to helmet collision with another player	1	0.03
playing football, hit the ground with helmet.	1	0.03
playing football, speared head against another players chest	1	0.03
playing hockey	1	0.03
playing hockey and went into the boards head first at full speed	1	0.03
playing hockey, Pt. body checked another player	1	0.03
playing hockey, hit in the head with hockey stick	1	0.03
playing soccer, ran into wall	1	0.03
playing soccer- tripped or fell off ball and struck head on asphalt	1	0.03
power scooter	1	0.03
pt fell out of a moving venicle as it made a turn travelling 20mph	1	0.03
pt tackled another child and had his head snap backward	1	0.03
pt was playing underneath a parachute in daycare, it is unkown how she hurt her neck	1	0.03
pt was swinging on a swing and may have twisted her neck	1	0.03
pt was wrestling when neck was twisted to the left	1	0.03
pt. collided wth another player and a hockey stick forced to her neck	1	0.03
pull injury to arm	1	0.03
ran head on into classmate in gym class	1	0.03
ran into another player during lacrosse	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
roller-bladed into bike rack	1	0.03
rollerblading	1	0.03
ruff housing with his 21-year-old sibling	1	0.03
scooter	1	0.03
skateboarding while hanging on the back of a truck while the truck was going 20 mph, let go and fell landing on the back of his head	1	0.03
skating	1	0.03
skiing	1	0.03
skiing - off jump, face first into ground	1	0.03
sledding fall	1	0.03
snow boarding fall - no elevation documented	1	0.03
snowboarding	3	0.09
snowboarding fall	3	0.09
snowboarding, came over jump and crashed head first	1	0.03
snowboarding, vs. tree	1	0.03
snowboarding- flipped	1	0.03
snowboarding- went off jump and landed on head	1	0.03
snowmobile	2	0.06
soccer	4	0.12
soccer - head trauma and fall	1	0.03
soccer - ran into wall	1	0.03
soccer - trauma to head with goal post	1	0.03
soccer game	1	0.03
soccer, 'pt kicked in forehead by another player'	1	0.03
soccer- was kicked from behind and fell forward onto ground	1	0.03
soccer-jumped up came down hit heads with another player	1	0.03
softball	1	0.03
softball, playing catcher and player ran into pt who fell backwards and landed on bat	1	0.03
somersault	1	0.03
struck by a soccer ball on the right side of her neck.	1	0.03
struck head in the pool	1	0.03
struck in head during football	1	0.03

Primary Mechanism of Injury Text		
InjuryPrimaryMechanismtxt	Frequency	Percent
struck in head with baseball bat	1	0.03
struck metal bar at chin level while running	1	0.03
sweatshirt caught while going downstairs	1	0.03
swimming - struck head against concrete pool wall	1	0.03
swimming/unwitnessed	1	0.03
swinging from swing	1	0.03
swinging, fell off, forward hit head first onto frozen ground	1	0.03
tackled in football game	1	0.03
tackled playing football-head snapped back and helmet hit top of back	1	0.03
tackled while playing football	3	0.09
tackled while playing football, hit ground	1	0.03
tackled; hit ground head first	1	0.03
teammate fell on patients head during cheerleading	1	0.03
threw head back, hit head on back of chair.	1	0.03
thrown from ATV into a fence pole	1	0.03
thrown from horse	1	0.03
tossed by waves at beach	1	0.03
touch football	1	0.03
toy battery op. 4-wheeler	1	0.03
trampoline fall	1	0.03
trampoline injury	2	0.06
trampoline injury-fall on neck while doing backflip	1	0.03
turned neck	1	0.03
turning cartwheels	1	0.03
twisted neck in gym	1	0.03
unknown, was playing in room by herself	1	0.03
unorganized sports- wrestling at home	1	0.03
unwitnessed crush to pelvis	1	0.03
unwitnessed near drowning; ?jumped on by another child	1	0.03
volleyball hit him in chin and knocked back causing him to fall on his back	1	0.03
watercraft collision	1	0.03
while playing basketball, hit in back of head with basketball	1	0.03

Primary Mechanism of Injury Text			
InjuryPrimaryMechanismtxt	Frequency	Percent	
wrestling	10	0.30	
wrestling - dropped onto post. neck w/hyperflexion	1	0.03	
wrestling - thrown to the ground	1	0.03	
wrestling c brother at home	1	0.03	
wrestling earlier today when he was picked up and dropped on his head.	1	0.03	
wrestling injury	1	0.03	
wrestling match - elbow to ribs and slammed to mat	1	0.03	
wrestling with father	1	0.03	
wrestling with friend, fell down, and friend fell on top of him.	1	0.03	
wrestling, brother twisted his neck	1	0.03	
wrestling, strained neck in a hold	1	0.03	
wrestling, when another child fell on top of his head	1	0.03	
wrestling-dropped on head	1	0.03	
wrestling-landed on neck	1	0.03	

Motor Vehicle Collision: Type of collision - Rear end collision		
MVCREC	Frequency	Percent
•	2425	73.17
0	747	22.54
1	142	4.28

Motor Vehicle Collision: Type of collision - Head on collision		
MVCHOC	Frequency	Percent
	2425	73.17
0	627	18.92
1	262	7.91

Motor Vehicle Collision: Type of collision - Side Impact		
MVCSI	Frequency	Percent
•	2425	73.17
0	663	20.01
1	226	6.82

Motor Vehicle Collision: Type of collision - Rollover		
MVCRO	Frequency	Percent
	2425	73.17
0	754	22.75
1	135	4.07

Motor Vehicle Collision: Type of collision - Ejected from automobile		
MVCEFA	Frequency	Percent
	2425	73.17
0	812	24.50
1	77	2.32

Motor Vehicle Collision: Type of collision - Death in the same collision		
MVCDSC	Frequency	Percent
	2425	73.17
0	843	25.44
1	46	1.39

Motor Vehicle Collision: Speed of patients vehicle		
MVCSpeed	Frequency	Percent
	2918	88.05
1	96	2.90
2	169	5.10
3	131	3.95

Motor Vehicle Collision: Was a passenger restraint system used?		
PassRestraint	Frequency	Percent
	2474	74.65
0	283	8.54
1	557	16.81

Other Motorized Transport Crash: Speed of patients vehicle		
OMTSpeed	Frequency	Percent
	3278	98.91
1	22	0.66
2	12	0.36
3	2	0.06

Blunt injury: Assault?		
Assault	Frequency	Percent
	3106	93.72
0	102	3.08
1	106	3.20

Blunt injury: Suspected or confirmed child abuse?		
ChildAbuse	Frequency	Percent
•	3106	93.72
0	189	5.70
1	19	0.57

Blunt injury: Shaken baby syndrome?			
ShakenBabySyndrome	Frequency	Percent	
	3106	93.72	
0	202	6.10	
1	6	0.18	

Fall from elevation: Estimated height in feet			
FallFromElevation	Frequency	Percent	
	2866	86.48	
1	93	2.81	
2	228	6.88	
3	127	3.83	

Fall down stairs: Estimated number of stairs			
FallDownStairs	Frequency	Percent	
	3224	97.28	
1	28	0.84	
2	59	1.78	
3	3	0.09	

The FREQ Procedure

Was the injury a result of an object striking the neck?		
clotheslining Frequency Percen		Percent
	2088	63.01
N	1084	32.71
ND	111	3.35
Y	31	0.94

Was the child wearing protective helmet?		
helmet	Frequency	Percent
	2275	68.65
N	462	13.94
ND	324	9.78
Y	253	7.63

Was the impact head first striking against the ground or other solid object OR did a heavy object strike directly on top of the head?

HeadFirst Frequency Percent

N 1008 30.42

ND 1511 45.59

Y 795 23.99

If yes, indicate the region of the head that was struck			
HeadFirstRegion Frequency Percen		Percent	
	2519	76.01	
В	165	4.98	
F	144	4.35	
ND	338	10.20	
S	70	2.11	
T	78	2.35	