| **Var #** | **Variable Name** | **Label** | **Type** | **Format** | **Format Values** | **Descriptive from Entire Baseline Sample** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | subject\_id | Subject ID | Char | $5. |  | N: 240 (100%) Levels: 240 |
| 2 | visit |  | Num | FMT0307F. | 1=Baseline 2=Remote Follow-up 1.5=In Person Follow-up | Baseline: 240 (100%) |
| 3 | checkin\_bin | Football exposure group | Num | FMT0149F. | 1=High Exposure (HE): Former NFL 2=Medium Exposure (ME): Former College 3=Control (CTL) | High Exposure (HE): Former NFL: 120 (50%) Medium Exposure (ME): Former College: 60 (25%) Control (CTL): 60 (25%) |
| 4 | exposurebin | Exposure Bin | Num | FMT0264F. | 0=Unexposed 1=Exposed | Unexposed: 60 (25%) Exposed: 180 (75%) |
| 5 | age\_decade | Age group | Num | FMT0123F. | 1=45-54 2=55-64 3=65-74 | 45-54: 109 (45.4%) 55-64: 70 (29.2%) 65-74: 61 (25.4%) |
| 6 | racecat\_combined | Race Categories Combined | Num | FMT0101F. | 0=Not Reported 1=American Indian or Alaska Native 2=Asian 3=Black or African-American 4=Native Hawaiian or other Pacific Islander 5=White 6=Multiple races selected 777=Refused 999=Unknown | Black or African-American: 87 (36.3%) Native Hawaiian or other Pacific Islander: 1 (0.4%) White: 149 (62.1%) Multiple races selected: 3 (1.3%) |
| 7 | eduyears | How many years of school did you attend as a full-time student? Use the guidelines below to determine actual number to enter | Num | BEST12. |  | N: 240 NMiss: 0 Mean(SD): 16.9 (2.1) Median(IQR): 16.0 (16.0 - 18.0) Min - Max: 13.0 - 30.0 |
| 8 | totyr\_foot | Total years of football play | Num |  |  | N: 180 NMiss: 60 Mean(SD): 15.9 (4.4) Median(IQR): 16.0 (13.0 - 19.0) Min - Max: 6.0 - 25.0 |
| 9 | chiiseas\_pf | Lifetime Load (seasons)-Football Hits based on PEM frequency | Num |  |  | N: 180 NMiss: 60 Mean(SD): 10915 (4627.2) Median(IQR): 9832.3 (7679.6 - 13319) Min - Max: 3560.3 - 28020 |
| 10 | chiiyrs\_pf | Lifetime Load (years)-Football Hits based on PEM frequency | Num |  |  | N: 180 NMiss: 60 Mean(SD): 8229.1 (3741.4) Median(IQR): 7071.4 (5466.5 - 10090) Min - Max: 2167.7 - 20394 |
| 11 | chiiseas\_pl | Lifetime Load (seasons)-Football Hits based on PEM linear acceleration (g-force) | Num |  |  | N: 180 NMiss: 60 Mean(SD): 229271 (72383) Median(IQR): 220509 (176321 - 270987) Min - Max: 79213 - 446257 |
| 12 | chiiyrs\_pl | Lifetime Load (years)-Football Hits based on PEM linear acceleration (g-force) | Num |  |  | N: 180 NMiss: 60 Mean(SD): 171700 (52798) Median(IQR): 173952 (131075 - 204793) Min - Max: 47298 - 337689 |
| 13 | chiiseas\_pg | Lifetime Load (seasons)-Football Hits based on PEM rotational impacts (rad/sec2) | Num |  |  | N: 180 NMiss: 60 Mean(SD): 1.84E7 (6.42E6) Median(IQR): 1.78E7 (1.37E7 - 2.23E7) Min - Max: 6.05E6 - 4.41E7 |
| 14 | chiiyrs\_pg | Lifetime Load (years)-Football Hits based on PEM rotational impacts (rad/sec2) | Num |  |  | N: 180 NMiss: 60 Mean(SD): 1.37E7 (4.85E6) Median(IQR): 1.32E7 (1.01E7 - 1.72E7) Min - Max: 3.43E6 - 3.15E7 |
| 15 | timepoint\_aparc\_6 | Time point: 1 = baseline, 2 = follow up Version 6.0 | Num | FMT0237F. | 1=Baseline 2=Follow-up | Baseline: 230 (95.8%) Missing: 10 (4.2%) |
| 16 | rh\_volume\_freesurfer\_version\_6 | The version of freesurfer used to generate the segmentation Version 6.0 | Char | $57. |  | N: 230 (95.8%) NMiss: 10 (4.2%) Levels: 1 |
| 17 | rh\_volume\_atlas\_6 | Freesurfer Atlas used for cortical parcellation Version 6.0 | Char | $33. |  | N: 230 (95.8%) NMiss: 10 (4.2%) Levels: 1 |
| 18 | rhbanksstsvolume\_6 | Volume in mm of the right hemisphere pial surface APARC bankssts parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2277.8 (372.8) Median(IQR): 2267.0 (2026.0 - 2493.0) Min - Max: 1405.0 - 3659.0 |
| 19 | rhcaudalanteriorcingulatevolum\_6 | Volume in mm of the right hemisphere pial surface APARC caudalanteriorcingulate parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2010.4 (502.2) Median(IQR): 1991.0 (1675.0 - 2292.0) Min - Max: 506.0 - 3705.0 |
| 20 | rhcaudalmiddlefrontalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC caudalmiddlefrontal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 5794.6 (985.3) Median(IQR): 5758.0 (5036.0 - 6445.0) Min - Max: 3444.0 - 8897.0 |
| 21 | rhcuneusvolume\_6 | Volume in mm of the right hemisphere pial surface APARC cuneus parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 3586.0 (622.4) Median(IQR): 3541.5 (3152.0 - 3911.0) Min - Max: 2430.0 - 6032.0 |
| 22 | rhentorhinalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC entorhinal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 1948.4 (366.3) Median(IQR): 1947.5 (1747.0 - 2141.0) Min - Max: 933.0 - 3712.0 |
| 23 | rhfusiformvolume\_6 | Volume in mm of the right hemisphere pial surface APARC fusiform parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 9815.4 (1302.7) Median(IQR): 9763.0 (8882.0 - 10618) Min - Max: 7092.0 - 14133 |
| 24 | rhinferiorparietalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC inferiorparietal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 15169 (2427.0) Median(IQR): 14908 (13390 - 16397) Min - Max: 9614.0 - 25408 |
| 25 | rhinferiortemporalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC inferiortemporal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 10833 (1640.3) Median(IQR): 10861 (9711.0 - 11841) Min - Max: 6677.0 - 15187 |
| 26 | rhisthmuscingulatevolume\_6 | Volume in mm of the right hemisphere pial surface APARC isthmuscingulate parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2545.7 (400.1) Median(IQR): 2502.0 (2288.0 - 2808.0) Min - Max: 1510.0 - 3530.0 |
| 27 | rhlateraloccipitalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC lateraloccipital parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 12976 (2043.7) Median(IQR): 12849 (11536 - 14162) Min - Max: 8122.0 - 20123 |
| 28 | rhlateralorbitofrontalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC lateralorbitofrontal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 7621.8 (881.5) Median(IQR): 7574.5 (7016.0 - 8170.0) Min - Max: 5265.0 - 11631 |
| 29 | rhlingualvolume\_6 | Volume in mm of the right hemisphere pial surface APARC lingual parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 7511.4 (1267.4) Median(IQR): 7411.5 (6519.0 - 8323.0) Min - Max: 3638.0 - 11292 |
| 30 | rhmedialorbitofrontalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC medialorbitofrontal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 5545.2 (645.9) Median(IQR): 5490.0 (5131.0 - 5941.0) Min - Max: 3855.0 - 7751.0 |
| 31 | rhmiddletemporalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC middletemporal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 12236 (1712.0) Median(IQR): 12216 (11132 - 13284) Min - Max: 6999.0 - 17427 |
| 32 | rhparahippocampalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC parahippocampal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 1922.6 (300.0) Median(IQR): 1882.5 (1725.0 - 2099.0) Min - Max: 1006.0 - 2958.0 |
| 33 | rhparacentralvolume\_6 | Volume in mm of the right hemisphere pial surface APARC paracentral parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 3955.7 (554.5) Median(IQR): 3948.5 (3573.0 - 4300.0) Min - Max: 2604.0 - 5694.0 |
| 34 | rhparsopercularisvolume\_6 | Volume in mm of the right hemisphere pial surface APARC parsopercularis parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 3861.7 (608.2) Median(IQR): 3850.5 (3442.0 - 4245.0) Min - Max: 2383.0 - 7190.0 |
| 35 | rhparsorbitalisvolume\_6 | Volume in mm of the right hemisphere pial surface APARC parsorbitalis parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2789.1 (396.1) Median(IQR): 2767.0 (2514.0 - 3068.0) Min - Max: 1785.0 - 4628.0 |
| 36 | rhparstriangularisvolume\_6 | Volume in mm of the right hemisphere pial surface APARC parstriangularis parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 4299.3 (696.4) Median(IQR): 4265.5 (3775.0 - 4745.0) Min - Max: 2957.0 - 7818.0 |
| 37 | rhpericalcarinevolume\_6 | Volume in mm of the right hemisphere pial surface APARC pericalcarine parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2899.7 (562.9) Median(IQR): 2837.5 (2530.0 - 3212.0) Min - Max: 1607.0 - 4979.0 |
| 38 | rhpostcentralvolume\_6 | Volume in mm of the right hemisphere pial surface APARC postcentral parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 9385.6 (1454.2) Median(IQR): 9245.0 (8332.0 - 10153) Min - Max: 6204.0 - 16077 |
| 39 | rhposteriorcingulatevolume\_6 | Volume in mm of the right hemisphere pial surface APARC posteriorcingulate parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 3278.1 (542.7) Median(IQR): 3238.5 (2952.0 - 3555.0) Min - Max: 1303.0 - 5393.0 |
| 40 | rhprecentralvolume\_6 | Volume in mm of the right hemisphere pial surface APARC precentral parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 13132 (1666.6) Median(IQR): 13003 (11981 - 14178) Min - Max: 8380.0 - 20396 |
| 41 | rhprecuneusvolume\_6 | Volume in mm of the right hemisphere pial surface APARC precuneus parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 10359 (1422.7) Median(IQR): 10247 (9391.0 - 11194) Min - Max: 7311.0 - 15183 |
| 42 | rhrostralanteriorcingulatevolu\_6 | Volume in mm of the right hemisphere pial surface APARC rostralanteriorcingulate parce Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2023.6 (446.5) Median(IQR): 1992.0 (1691.0 - 2309.0) Min - Max: 825.0 - 3255.0 |
| 43 | rhrostralmiddlefrontalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC rostralmiddlefrontal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 15935 (2100.1) Median(IQR): 15849 (14602 - 17020) Min - Max: 9995.0 - 27407 |
| 44 | rhsuperiorfrontalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC superiorfrontal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 20467 (2600.1) Median(IQR): 20277 (18619 - 22005) Min - Max: 13960 - 28487 |
| 45 | rhsuperiorparietalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC superiorparietal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 13173 (2264.7) Median(IQR): 12955 (11636 - 14601) Min - Max: 7352.0 - 20986 |
| 46 | rhsuperiortemporalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC superiortemporal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 11834 (1491.3) Median(IQR): 11616 (10895 - 12711) Min - Max: 7516.0 - 17048 |
| 47 | rhsupramarginalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC supramarginal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 10363 (1532.0) Median(IQR): 10268 (9310.0 - 11331) Min - Max: 6983.0 - 15147 |
| 48 | rhfrontalpolevolume\_6 | Volume in mm of the right hemisphere pial surface APARC frontalpole parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 1023.6 (156.3) Median(IQR): 1008.5 (917.0 - 1104.0) Min - Max: 691.0 - 1712.0 |
| 49 | rhtemporalpolevolume\_6 | Volume in mm of the right hemisphere pial surface APARC temporalpole parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 2365.1 (364.3) Median(IQR): 2323.5 (2127.0 - 2599.0) Min - Max: 1480.0 - 3528.0 |
| 50 | rhtransversetemporalvolume\_6 | Volume in mm of the right hemisphere pial surface APARC transversetemporal parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 940.5 (148.7) Median(IQR): 940.0 (827.0 - 1032.0) Min - Max: 597.0 - 1417.0 |
| 51 | rhinsulavolume\_6 | Volume in mm of the right hemisphere pial surface APARC insula parcel Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 7553.9 (891.1) Median(IQR): 7520.5 (6930.0 - 8049.0) Min - Max: 5017.0 - 9957.0 |
| 52 | rh\_volume\_BrainSegVolNotVent\_6 | Brain Segmentation Volume Without Ventricles Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 1.16E6 (110226) Median(IQR): 1.16E6 (1.09E6 - 1.22E6) Min - Max: 821325 - 1.52E6 |
| 53 | rh\_volume\_eTIV\_6 | Estimated Total Intracranial Volume Version 6.0 | Num | BEST12. |  | N: 230 NMiss: 10 Mean(SD): 1.17E6 (131890) Median(IQR): 1.17E6 (1.09E6 - 1.25E6) Min - Max: 886005 - 1.91E6 |