Supplemental Table 3: Studies exploring traumatic brain injury with a wrTBI subset (n=9)

(Sample sizes are for entire study population unless otherwise specified)

Author & Year, Location [Period]	Design [sample size]	Study population	Data source	Case definition: TBI	Case definition: work	% wrTBI	Quality Asses.
Atci et al. 2015 Elazig, Turkey [2014-2014]	Retrospective medical record review [N=3,524]	TBI at Elazig Training and Research Hospital	Medical records (patients and hospital registration)	"All traumatic head injuries that resulted from any physical injury, falls and suicide attempt." Severity: GCS 14-15 mild, 9-13 moderate, 3-8 severe	"Occupational accidents"	10.73% **Reported as 18.4% of falls or 378 cases*	20/30 (67%)
Autret et al. 2015 Rennes, France [2008-2010]	Retrospective cohort study [TBI subset n=34]	Brain injuries at a rehabilitation centre	Medical charts, professional reintegration unit files, phone interviews	"Traumatic brain injury" Severity: GCS	"Work-related injury"	35.29% **Reported as 12/34 or 36.4%, the authors miscalculated the reported percentage*	18/28 (64%)
Kahan et al. 2018 New Zealand [2010-2011]	Longitudinal cohort study [N=205]	TBI in the Hamilton and Waikato regions	Brain Injury Incidence and Outcomes New Zealand In the Community (BIONIC) study	World Health Organization criteria for TBI diagnosis Severity: GCS; 13–15 score = mild and post-traumatic amnesia (<24 hours)	"place of injury: work place"	19.5%	23/28 (82%)
Mauritz et al. 2014 Austria [2009-2011]	Retrospective cohort study [N=81,112; Residents n=73,662; Visitors n=7,450]	Hospital admissions for TBI	Hospital admissions as presented by Statistik Austria	ICD-10 codes S06.0–S06.9	"Cause of injury: work-related"	2.57% **Reported as 91 (1.2%) visitors from table I and 1989 (2.7%) residents from table II*	29/34 (85%)
§ McIntosh et al. 2016 Australia [2000-2013]	Retrospective case series [TBI Subset, n=58]	Quad bike fatalities	National Coronial Information System	AIS: 'Specific injury pathology: Traumatic brain injury'	"work activity"	18.97%, all fatal **Reported as 11/58 in supplemental table A9*	22/32 (69%)
§ Nosaka et al. 2015 Okayama, Japan [2012-2014] **excluded from meta analysis*	Retrospective cohort study [TBI Subset, n=8]	Traumatic injuries at Okayama University Hospital	Clinical records related to hospitalizations due to falls	AIS: H= head Severity: Injury Severity Score	"Working settings: Occupational"	25%, 50% fatal **Calculated from table 1*	27/30 (90%)
Rogers et al. 2015 United States [2010]	Retrospective, cross-sectional, descriptive study [N=2,087]	TBI in Levels I and II trauma centres	National Sample Program	ICD-9-CM codes (800-801.9, 803.0-804.9, 850.0-854.1, 959.01) Severity: GCS score of 9 to 12 or a head AIS of 3 or 4	Primary payer: Worker's compensation (half of wrTBIs)	3% [2.4% weighted]	22/28 (79%)
Russell and Daniell 2018 United States [Not Reported]	Cross-sectional study [TBI subset n=199] **Conducted survey to determine TBI history in 246 individuals*	TBI among theatre workers	Survey	Positive response to the prompt: "Can you think of any instance in your life in which you have hit your head?"	Self-reported: working in theater environments	70.35% **Reported as n=140 wrTBI, percentage calculated based on 199 with history of head impact*	20/28 (71%)
§ Terry et al. 2018 Vancouver, Canada [2015-2017]	Case-control study [N=102]	Four outpatient rehabilitation clinics for TBI	Standardized semi structured interview questionnaires	World Health Organization Neurotrauma Task Force definition of mild TBI	Workers' compensation claims	45.1%	27/28 (96%)

Acronyms: AIS - Abbreviated Injury Score, GCS - Glasgow Coma Scale, ICD - International Classification of Diseases (versions 9 or 10), mTBI - mild traumatic brain injury

§ indicates studies in multiple summary tables