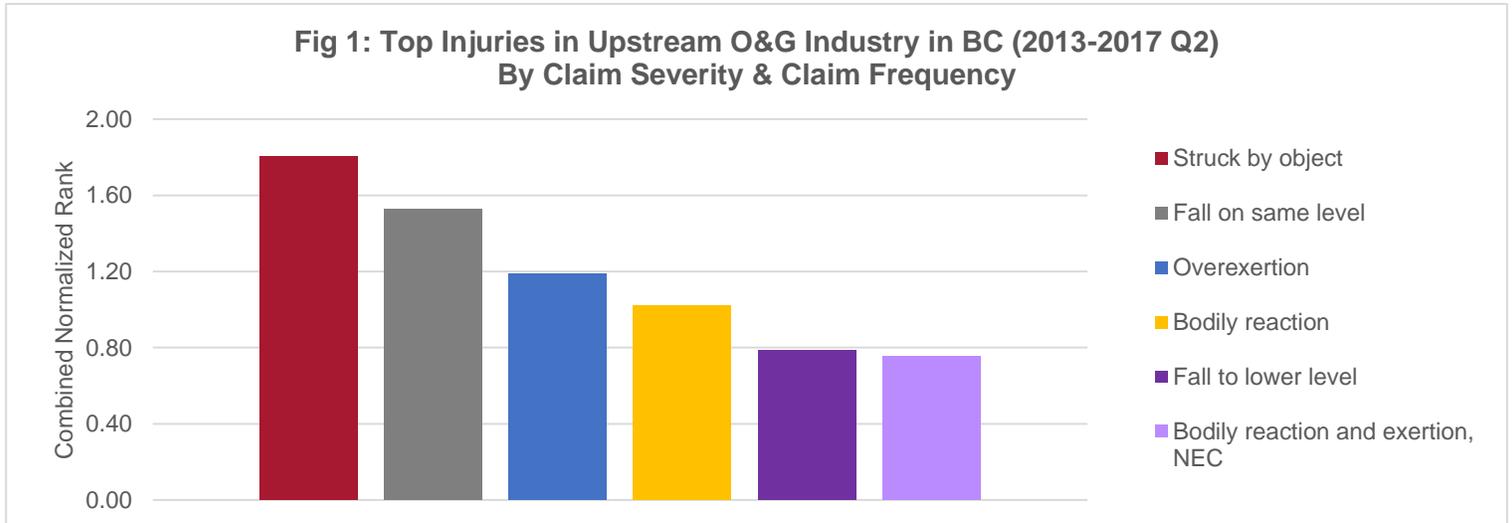


# Top Target Injuries for Upstream Oil & Gas Industry in British Columbia (2013-2017 Q2 Data)

Data Source: WorkSafeBC data, as of 2017 Q2 (include Short Term Disability, Long Term Disability and Fatality claims)



**Table 1: BC Top 10 Injuries - by Severity (Claim Cost)**

#	Top Injuries-Type of Accident	Total Claim Cost (2013-2017 Q2)	% of Total Cost
1	Struck by object	\$2,886,547	18%
2	Fall on same level	\$1,517,255	10%
3	Bodily reaction	\$1,457,141	9%
4	Fire-unintended or uncontrolled	\$1,376,139	9%
5	Overexertion	\$1,320,723	8%
6	Fall to lower level	\$1,042,181	7%
7	Nonhighway accident	\$998,665	6%
8	Bodily reaction and exertion,NEC	\$799,061	5%
9	Highway accident	\$676,349	4%
10	Caught in or compressed by object	\$575,832	4%
	<b>Grand Total</b>	<b>\$12,649,893</b>	<b>80%</b>

**Table 2: BC Top 10 Injuries - by Frequency (Claim Count)**

#	Top Injuries-Type of Accident	Total Claim Count (2013-2017 Q2)	% of Total Count
1	Fall on same level	53	14%
2	Struck by object	43	11%
3	Overexertion	39	10%
4	Bodily reaction	28	7%
5	Bodily reaction and exertion,NEC	26	7%
6	Fall to lower level	23	6%
7	Caught in or compressed by object	19	5%
8	Exposure to noise	15	4%
9	Nonhighway accident	15	4%
10	Highway accident	13	3%
	<b>Grand Total</b>	<b>274</b>	<b>73%</b>

## Glossary

**Target Injuries:** Claims grouped by type of accidents (event or exposure) over the given period of time.

**Claim Severity:** It is the function of claim cost, and is based on the assumption that claims involving higher costs are more severe in nature.

**Claim Frequency:** It is the function of claim count. Higher claim frequency implies higher claim count for a specific injury type over a period of time.

**Claim Cost:** It is the cost covered by the WorkSafeBC for all claims. This includes medical costs, rehabilitation costs, compensation costs and pension costs.

**Claim Rate:** The number of work-related injury claims per 100 person years worked. The claim rate for age groups is calculated using Statistics Canada data.

**Person Years:** The estimated number of full-time equivalent workers at a company. Full-time workers = 2000 person hours per year. It is derived from the employer's reported insurable earnings and the rate code's average weekly wage.

**Normalized Ranking:** For both claim severity and frequency, each of the target issues was given a normalized ranking using a method called feature scaling. This method scales the observed values to a range between 0 and 1, using this formula:

$x' = (x - \min(x)) / (\max(x) - \min(x))$ , where  $x$  is an original value, and  $x'$  is the normalized value.

Ranks from both variables (frequency and severity) are then combined together to give the final ranking.

**Upstream Oil & Gas Industry in British Columbia:** Includes six WorkSafeBC industry codes (classification units) that fund Enform as their Safety Association:

1. Oil or Gas Drilling - 704002
2. Oil or Gas Field Servicing - 704003
3. Seismic Exploration - 704009
4. Diamond Drilling, Seismic, or Shot Hole Drilling - 704010
5. Oil or Gas Production - 713018
6. Oil or Gas Transmission (oil or gas pipeline) - 767005

**Type of Accident:** Manner in which injury or disease was produced or inflicted by identified source (e.g. struck by object). The following definitions of top target injuries are sourced from CSA standard Z795-Coding of Work Injury or Disease Info.

**Struck by Object:** The "struck by" codes apply to injuries produced by forcible contact or impact between the injured person and the source of injury when the motion producing the contact is primarily that of the source of injury rather than the person.

**Fall on Same Level:** Fall on same level applies to instances in which the injury was produced by impact between the injured person and the source of injury, the motion producing the contact being that of the person, under the following circumstances: (a) the motion of the person was generated by gravity following the person's loss of equilibrium; and (b) the point of contact with the source of injury was at the same level or above the surface supporting the person at the inception of the fall.

**Overexertion:** Overexertion applies to cases, usually non-impact, in which the injury or illness resulted from excessive physical effort directed at an outside source of injury. The physical effort may involve lifting, pulling, pushing, turning, welding, holding, carrying, or throwing the source of injury.

**Bodily Reaction:** Codes in this major group apply to injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body. Generally, codes in this major group apply to the occurrence of strains, sprains, ruptures, nerve damage, or other internal injuries or illnesses resulting from the assumption of an unnatural position or from voluntary or involuntary motions induced by sudden noise, fright, or efforts to recover from slips or loss of balance (not resulting in falls).

**Fall to lower level:** Fall to lower level applies to instances in which the injury was produced by impact between the injured person and the source of injury, the motion producing the contact being that of the person, under the following circumstances: (a) the motion of the person and the force of impact were generated by gravity; and (b) the point of contact with the source of injury was lower than the surface supporting the person at the inception of the fall.

**Bodily reaction and exertion, NEC:** Bodily reaction and exertion division apply to cases, usually nonimpact, in which injury or illness resulted from free bodily motion, excessive physical effort, or repetition of a bodily motion. NEC stands for Not elsewhere classified,

**Data Disclaimer:** While every reasonable effort has been made to ensure the accuracy of the data used in this report, data should be read as indicative of scope rather than exact figures. The variable nature of WCB claims management may be reflected in the data shown. To report feedback/inquiries - [pmetrics@enform.ca](mailto:pmetrics@enform.ca)