



Health and Safety Injury Survey 2018-19

By FAME Health and Safety Working Group
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Background

Part of FAME's Health & Safety strategy is to assemble industry injury and accident data to allow organisations to benchmark their performance against the sector. This data will provide a better picture of Health and Safety across our sector and may assist with the development of preventative measures and improved ways of working. This is FAME's second Health and Safety Injury Survey, the first being completed for the 2009-10 financial year.

Methods

The questionnaire was created by the FAME Health & Safety committee and then distributed as a digital survey through Survey Monkey. The survey was sent to FAME members both as an email from Survey Monkey and as a link in an additional email sent from a FAME email address. This was done because we have found that Survey Monkey emails can be flagged as spam. In total, it was sent to 62 FAME members with 74 email addresses¹. We received responses from 20 members (32% of our members - 62), that employ 1171 archaeologists, a little over a quarter of the archaeologists employed in development-led archaeology at that time². The survey was launched in February of 2019. Not all of the respondents, six in total, answered every question. FAME followed up with calls and emails to those respondents to determine if that was because they had no accidents to report or because they stopped filling in the survey. All respondents confirmed that they left those questions empty because they did not have any accidents to report.

¹ some FAME members have multiple people that receive FAME correspondence

² See State of Archaeological Market 2018 report on the FAME website for more details on the size of the workforce <https://famearchaeology.co.uk/what-we-do/publications/>.

Results

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)

RIDDOR is the law that requires employers, and people in charge of work premises, to report and keep records of:

- work-related accidents which cause deaths
- work-related accidents which cause certain serious injuries (reportable injuries)
- diagnosed cases of certain industrial diseases; and
- certain 'dangerous occurrences' (incidents with the potential to cause harm)

It was last updated in 2013 and applies to many archaeological organisations and settings. Respondents were asked about their RIDDOR reportable injuries and the responses were:

Specified injuries (including fatality): 4

Injuries resulting in over 7 days absence: 3

2009/10 survey reported six in total but classifications have changed since then and are not directly comparable (major and over-3-day). Only one of those six was classified as major under the old RIDDOR reporting system.

The RIDDOR reported injuries, for 2018-19, were mostly related to handling, lifting and carrying (Table 1).

Type	Count
Injured whilst handling, lifting or carrying	4
Struck by moving, including flying or falling object	1
Slip, trip, fall, same level	1
Other kind of accident	1

Table 1: Reported types of RIDDOR injuries for 2018.

Non-Reportable Accidents and Near Misses

Respondents were also asked about non-reportable accidents and near misses, of which there was over 100 each (Table 2).

Type	Count
Total number of non-reportable accidents	147
Total number of near misses reported	140
Total number of Lost-time Injuries*	16
Other kind of accident	1

Table 2: Non-RIDDOR accidents and near misses for 2018-19. * - defined as any work-related injury resulting in absence from work for all of the following day, and up to 7 days.

In order to provide data on incidence of commonly occurring accidents/incidents across the sector respondents were asked to report the number of accident book entries by categories (Table 3 Figure 1).

Type	Count
Ergonomic/Manual Handling	23
Other	18
Slip, trip or fall	9
Contact with or knocking into object	7
Vehicle accident (travelling on work business, including to or from site)	3

Table 3: Type of Non-RIDDOR accidents and near misses for 2018-19.

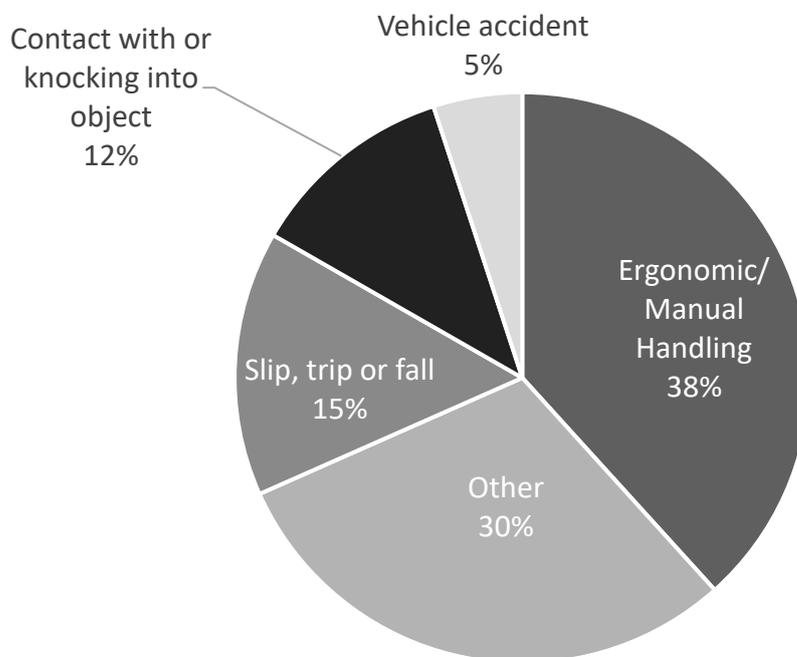


Figure 1: Type of Non-RIDDOR accidents and near misses for 2018-19.

Injury Frequency Rate and Incident Rate

There are two main ways in which injury rate figures can be generated: Incident Rate or Frequency Rate³. The Injury Frequency Rate indicates the number of Reportable Injuries employee are likely to have for every 1,000,000 hours worked. It is calculated in the following manner:

$$\text{(Number of Reportable Injuries in the period / Total hours worked (by all employees) during the period) X 1,000,000}$$

While the Incident Rate is the number of injuries per 100,000 employees and is calculated in this manner:

$$\text{(Injuries (per year) / employed) * 100,000}$$

Respondents reported that the 1,171 archaeologists they represent worked a total of 1,990,053 hours over the preceding year. The estimated Injury frequency and Incident rates for the sector are as follow:

RIDDOR	Injury frequency rate	Incident Rate
Specified injuries (including fatality)	2.01	342
Injuries resulting in over 7 days absence	1.51	256

Table 4: Estimated Injury frequency and incident rate of respondents to the survey

In the 2009/10 survey the lost time frequency was 3.98.

Compared to other sectors

The Health and Safety Executive (HSE) provides data for Incident Rates by Standard Industrial Classification codes for different sectors. They use the SIC 2007. When compared to the top level, sector, classifications archaeology appears to fare poorly (Table 5). However, these top level classifications cover a broad range of jobs within the occupations. Breaking them further down into single digit SIC classifications we find archaeology while still high has lower rates than some other occupations (Table 6). Furthermore, the small size of the sector means that even one or two accidents per year, more or less, can have a dramatic impact on its placement. In Table 6 we have also calculated the Incident Rates for archaeology if there were one more or one less, of each, specified and over 7 day injuries. This shows that with just one or

³ for more information see <http://www.hse.gov.uk/statistics/adhoc-analysis/injury-frequency-rates.pdf>

two less RIDDOR reported injuries per year archaeology would fall over a dozen places.

	Total reported non-fatal injury	Specified	Over-7-day
Water supply; sewerage, waste management and remediation activities	960	253	707
Transportation and storage	768	172	597
Archaeology	597	341	256
Agriculture, forestry and fishing	507	205	302
Manufacturing	468	106	362
Construction	366	128	239
Human health and social work activities	310	64	246
Accommodation and food service activities	276	59	216
Administrative and support service activities	262	72	190
Public administration and defence; compulsory social security; education; human health and social work activities	231	59	171

Other sectors with lower rates are not covered in this table for space reasons – see full data list in the appendix, Table 10.

Table 5: Incident rates by Standard Industrial Classification codes. Data found here <https://www.hse.gov.uk/statistics/tables/index.htm#riddor>

	Total reported non-fatal injury	Specified	Over-7-day
Other manufacturing	2071	468	1604
Waste collection, treatment and disposal activities; materials recovery	1586	399	1187
Warehousing and support activities for transportation	1402	305	1098
Manufacture of food products	1027	206	821
Extraction of crude petroleum and natural gas	966	199	767
Air transport	946	171	775
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	943	227	715
Manufacture of basic metals	883	213	671
Archaeology + 1	769	427	342
Manufacture of textiles	730	160	570
Manufacture of furniture	608	110	499
Archaeology (Current)	597	341	256
Forestry and logging	578	213	366
Manufacture of other non-metallic mineral products	578	154	424
Manufacture of paper and paper products	543	142	401
Postal and courier activities	527	131	395
Manufacture of fabricated metal products, except machinery and equipment	508	129	379
Crop and animal production, hunting and related service activities	487	203	284
Services to buildings and landscape activities	473	118	355
Manufacture of rubber and plastic products	468	95	374
Accommodation	462	115	347
Manufacture of beverages	438	117	322
Archaeology -1	427	256	171
Land transport and transport via pipelines	419	99	320
Construction of buildings; Specialised construction activities	415	145	270

Table 6: Top 25 subsectors and 3 estimated ranges of development led archaeology's Incident Rates. See Table 10 in appendix for full list.

The Health and Safety Executive only reports data using the Incident Rate and does not report on Frequency Rates. However, they do provided a methodology for generating the Frequency Rates for sectors⁴. This is done by using the average hours worked to provided estimates:

$$\text{Incidence Rate} * 10 / (\text{average Hours per week} * \text{Weeks per Year})$$

HSE does not produce this hours worked data, but the Office for National Statistics (ONS) does. There are two main sources of data on hours of work:

- the Annual Survey of Hours and Earnings (ASHE) survey
- the Labour Force Survey (LFS)

Data from the Labour Force Survey was first examined. It was downloaded from the ONS website⁵. It is by quarter and only has data on the top level SIC codes. The full data table is in the appendix (Table 11). Because the data was by quarter, for each sector the quarters were averaged together and then using the recommended formula to convert to the Incidence Rate to Injury Frequency Rate we calculated the Frequency rate. That data showed that Archaeology has the highest specified and forth highest Over-7-day rates (Table 7). Though as shown in in the above examination of Incident Rates the higher level categories obscure significant variation in the sub-sectors, which archaeology is. Unfortunately, the Labour Force Survey does not provide this level of detail so the Annual Survey of Hours and Earnings (ASHE) survey was then examined.

⁴ see <http://www.hse.gov.uk/statistics/adhoc-analysis/injury-frequency-rates.pdf>

⁵

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/averagehoursworkedbyindustryhour03>

	Specified		Over-7-day
Archaeology	2.01	Transportation and storage	3.19
Transportation and storage	0.92	Manufacturing	1.93
Agriculture, forestry and fishing	0.89	Human health and social work activities	1.61
Construction	0.66	Archaeology	1.51
Manufacturing	0.56	Accommodation and food service activities	1.48
Administrative and support service activities	0.44	Agriculture, forestry and fishing	1.31
Human health and social work activities	0.42	Construction	1.23

See Table 12 in appendix for full list of sectors

Table 7: Calculated Injury Frequency Rate for sectors based on the Labour Force Survey data.

The ASHE data was downloaded⁶ and then combined with the Incidence Rate data to get the Injury Frequency Rate. The results slightly change the position of archaeology relating to specified injuries, with it being second (Table 8). For Over-7-day, it moved archaeology down to 26th, very similar to construction of buildings. That occupation classification is much closer to the environment faced in development-led archaeology, as opposed to the top level construction category that includes civil engineering.

⁶ Downloaded from <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/industry4digitsic2007ashtable16>

	Specified		Over-7-day
Other manufacturing	2.50	Other manufacturing	8.57
Archaeology	2.01	Waste collection, treatment and disposal activities; materials recovery	5.41
Waste collection, treatment and disposal activities; materials recovery	1.82	Warehousing and support activities for transportation	5.37
23 rows skipped see Table 13 in the appendix for full list			
Construction	0.63	Agriculture, forestry and fishing	1.58
Creative, arts and entertainment activities	0.63	Water transport (3)	1.52
Manufacture of fabricated metal products, except machinery and equipment	0.62	Archaeology	1.51
Manufacture of beverages	0.59	Crop and animal production, hunting and related service activities	1.49
Water collection, treatment and supply; Sewerage	0.54	Human health and social work activities	1.49
Manufacture of furniture	0.54	Land transport and transport via pipelines	1.48
Residential care activities	0.52	Accommodation and food service activities	1.48
Manufacturing	0.52	Residential care activities	1.43
Arts, entertainment and recreation	0.51	Construction of buildings; Specialised construction activities	1.36

Table 8: Calculated Injury Frequency Rate for sectors based on the ASHE data.

Discussion

Given the fairly large swings from tiny changes in reported accidents and the fact that this survey is a sampling of the sector, which comes with inherent errors, no conclusions should be drawn about archaeology injury rates as being better or worse than most other sectors. Broadly, one can say it is unlikely that archaeology has the highest or lowest incident rates of other sectors. We appear to be similar in most aspects to the construction of buildings occupations which makes sense as they share work environments sometimes.

As demonstrated only a couple of incidents can greatly change the rate. Two archaeologists carrying a bulky piece of equipment together tripping and hurting themselves can easily change the rate for the whole sector significantly. We will need to average together several year's data to be able to estimate the rates accurately and with precision.

As it currently stands, the RIDDOR numbers are not as concerning, though one would hope we eventually get close to zero. To help understand this in 'real life' terms imagine someone who has a career in archaeology in which they work 40 hours a week, for 50 weeks a year, for 50 years, which is 100,000 hours, or a (very long) career. With the Frequency Rates of RIDDOR injuries at 2.01 and 1.51 that would mean over that career they could expect to have .2 or .15 RIDDOR reportable injuries. Most people will never experience one in development-led archaeology.

However, for an injury to be RIDDOR reportable it has to be the result of a separate, identifiable, unintended incident, which causes physical injury. So, an injury or illness resulting in time off work in itself is not reportable unless there is an identifiable event that caused the injury, for example, an object striking someone. For the non-RIDDOR events the injury frequency rates are much higher in development-led archaeology:

	Frequency Rates
Non-reportable accidents	73.87
Near misses	70.35
Lost-time Injuries	8.04

Table 9: Non-RIDDOR injury frequency rates.

That same person, with the long career, would likely experience seven near misses and injuries, each, during their very long career, an average of an injury or near miss every three and half years.

We will need to change future surveys to better understand this issues but the reporting indicates that Ergonomic/Manual Handling is the most significant cause of

problems. Muscle injuries can be cumulative and repetitive stress injuries would also not be caught by RIDDOR reporting as they are not caused by a single event. In future surveys we will aim to collect better data on the non-RIDDOR reported injuries to confirm this. Currently, the data cannot confirm this, only indicate it is a possibility. More research will be needed to be able to help identify the problems so the sector can start to develop solutions.



Appendix

	Total reported non-fatal injury	Specified	Over-7-day
Other manufacturing	2071	468	1604
Waste collection, treatment and disposal activities; materials recovery	1586	399	1187
Warehousing and support activities for transportation	1402	305	1098
Manufacture of food products	1027	206	821
Extraction of crude petroleum and natural gas	966	199	767
Air transport	946	171	775
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	943	227	715
Manufacture of basic metals	883	213	671
Archaeology + 1	769	427	342
Manufacture of textiles	730	160	570
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Archaeology (Current)	597	341	256
Forestry and logging	578	213	366
Manufacture of other non-metallic mineral products	578	154	424
Manufacture of paper and paper products	543	142	401
Postal and courier activities	527	131	395
Manufacture of fabricated metal products, except machinery and equipment	508	129	379
Crop and animal production, hunting and related service activities	487	203	284
Services to buildings and landscape activities	473	118	355
Manufacture of rubber and plastic products	468	95	374
Accommodation	462	115	347
Manufacture of beverages	438	117	322
Archaeology (-1)	427	256	171
Land transport and transport via pipelines	419	99	320
Construction of buildings; Specialised construction activities	415	145	270
Other mining and quarrying	386	152	235
Human health activities	369	62	307
Water transport (3)	348	61	287
Water collection, treatment and supply; Sewerage	338	107	230
Residential care activities	335	90	246

	Total reported non-fatal injury	Specified	Over-7-day
Security and investigation activities	275	71	204
Repair and installation of machinery and equipment	273	73	199
Printing and reproduction of recorded media	267	55	213
Creative, arts and entertainment activities	266	97	170
Manufacture of motor vehicles, trailers and semi-trailers	264	62	202
Administrative and support service activities	262	72	190
Food and beverage service activities	231	46	185
Public administration and defence; compulsory social security; education; human health and social work activities	231	59	171
Wholesale and retail trade and repair of motor vehicles and motorcycles	226	71	155
Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities	223	52	171
Wholesale trade, except of motor vehicles and motorcycles	209	55	154
Public administration and defence; compulsory social security	208	56	153
Public administration and defence; compulsory social security	208	56	153
Other personal service activities	208	61	147
Manufacture of chemicals and chemical products	205	42	162
Wholesale and retail trade; repair of motor vehicles and motorcycles	200	49	151
Sports activities and amusement and recreation activities	198	89	109
Manufacture of machinery and equipment n.e.c.	197	48	149
Mining and quarrying	194	56	138
Retail trade, except of motor vehicles and motorcycles	194	44	150
Civil engineering	191	66	125
Office administrative, office support and other business support activities	184	74	110
Manufacture of other transport equipment	183	49	135
Veterinary activities	175	40	135
Arts, entertainment and recreation	172	73	99
Manufacture of electrical equipment	167	43	124
Electricity, gas, steam and air conditioning supply	161	49	112

	Total reported non-fatal injury	Specified	Over-7-day
Electricity, gas, steam and air conditioning supply	161	49	112
Remediation activities and other waste management services.	159	66	93
Telecommunications	155	42	113
Rental and leasing activities	150	60	89
Education	146	55	91
Education	146	55	91
Social work activities without accommodation	138	41	97
Arts, entertainment and recreation; other service activities; activities of households as employers; undifferentiated goods-and services-producing activities of households for own use; activities of extraterritorial organisations and bodies	138	52	86
Information service activities	122	59	63
Manufacture of basic pharmaceutical products and pharmaceutical preparations	118	25	93
Other service activities	118	35	83
Libraries, archives, museums and other cultural activities	108	43	65
Programming and broadcasting activities	106	20	86
Repair of computers and personal and household goods	95	11	84
Information and communication; financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities	79	23	56
Motion picture, video and television programme production, sound recording and music publishing activities	64	34	30
Manufacture of coke and refined petroleum products	63	21	42
Activities of membership organisations	55	20	35
Gambling and betting activities	46	16	30
Information and communication	41	13	28
Real estate activities	41	12	29
Real estate activities	41	12	29
Manufacture of wearing apparel	39	16	24
Manufacture of computer, electronic and optical products	39	5	34
Scientific research and development	38	13	24

	Total reported non-fatal injury	Specified	Over-7-day
Financial service activities, except insurance and pension funding	36	14	22
Other professional, scientific and technical activities	35	12	24
Professional, scientific and technical activities	22	8	14
Financial and insurance activities	19	8	11
Mining support service activities	15	6	9
Activities of head offices; management consultancy activities	15	7	7
Insurance, reinsurance and pension funding, except compulsory social security	14	7	7
Legal and accounting activities	12	7	5
Advertising and market research	12	5	6
Travel agency, tour operator and other reservation service and related activities	12	4	8
Publishing activities	11	4	7
Employment activities	10	6	4
Architectural and engineering activities; technical testing and analysis	5	2	2
Computer programming, consultancy and related activities	3	1	2
Activities auxiliary to financial services and insurance activities	1	0	1

Table 10: Full list of Incident Rates by SIC category released by HSE in 2018-19.

Sector SIC 2007 Top Level	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018	Jan-Mar 2019	Average
Agriculture, forestry & fishing	45.64	45.62	42.69	43.11	44.26
Mining, energy & water supply	37.88	38.04	35.98	37.62	37.38
Manufacturing	36.26	35.73	35.31	37.09	36.10
Construction	37.60	37.61	36.59	37.29	37.27
Wholesale, retail & repair of motor vehicles	30.29	30.11	30.22	30.42	30.26
Transport & storage	35.69	35.48	36.04	36.56	35.94
Accommodation & food services	27.11	28.53	28.21	28.28	28.03
Information & communication	36.23	34.90	34.71	36.34	35.54

Financial, insurance & real estate activities	34.19	34.22	33.38	34.32	34.03
Professional, scientific & technical activities	34.22	33.53	33.16	34.62	33.88
Administrative & support services	31.93	31.69	30.71	30.91	31.31
Public admin & defence; social security	32.95	31.84	31.95	33.16	32.47
Education	28.70	24.15	27.29	29.35	27.37
Human health & social work activities	29.54	29.25	29.13	29.75	29.42
Other services	29.47	29.07	28.34	29.09	28.99

Table 11: Labour Force Survey average hours worked per week by top level sector per quarter.

	Specified		Over-7-day
Archaeology	2.01	Transportation and storage	3.19
Transportation and storage	0.92	Manufacturing	1.93
Agriculture, forestry and fishing	0.89	Human health and social work activities	1.61
Construction	0.66	Archaeology	1.51
Manufacturing	0.56	Accommodation and food service activities	1.48
Administrative and support service activities	0.44	Agriculture, forestry and fishing	1.31
Human health and social work activities	0.42	Construction	1.23
Accommodation and food service activities	0.40	Administrative and support service activities	1.17
Education	0.39	Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities	1.09
Public administration and defence; compulsory social security	0.33	Public administration and defence; compulsory social security	0.91

Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities	0.33	Mining and quarrying	0.71
Mining and quarrying	0.29	Education	0.64
Other service activities	0.23	Other service activities	0.55
Information and communication	0.07	Information and communication	0.15
Professional, scientific and technical activities	0.05	Professional, scientific and technical activities	0.08

Table 12: Calculated Injury Frequency Rate for sectors based on the Labour Force Survey data.

	Specified		Over -7- day
Other manufacturing	2.50	Other manufacturing	8.57
Archaeology	2.01	Waste collection, treatment and disposal activities; materials recovery	5.41
Waste collection, treatment and disposal activities; materials recovery	1.82	Warehousing and support activities for transportation	5.37
Warehousing and support activities for transportation	1.49	Extraction of crude petroleum and natural gas	4.09
Water supply; sewerage, waste management and remediation activities	1.20	Air transport	4.06
Forestry and logging	1.13	Manufacture of food products	4.02
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1.10	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	3.45
Agriculture, forestry and fishing	1.07	Water supply; sewerage, waste management and remediation activities	3.37

Crop and animal production, hunting and related service activities	1.06	Manufacture of basic metals	3.23
Extraction of crude petroleum and natural gas	1.06	Manufacture of textiles	2.89
Manufacture of basic metals	1.02	Transportation and storage	2.88
Manufacture of food products	1.01	Manufacture of furniture	2.44
Air transport	0.90	Services to buildings and landscape activities	2.32
Transportation and storage	0.83	Accommodation	2.14
Manufacture of textiles	0.81	Manufacture of other non-metallic mineral products	2.01
Services to buildings and landscape activities	0.77	Postal and courier activities	2.00
Manufacture of other non-metallic mineral products	0.73	Manufacture of paper and paper products	2.00
Construction of buildings; Specialised construction activities	0.73	Forestry and logging	1.94
Accommodation	0.71	Human health activities	1.84
Manufacture of paper and paper products	0.71	Manufacture of fabricated metal products, except machinery and equipment	1.83
Sports activities and amusement and recreation activities	0.69	Manufacture of rubber and plastic products	1.81
Other mining and quarrying	0.67	Manufacturing	1.79
Postal and courier activities	0.66	Manufacture of beverages	1.63
Construction	0.63	Agriculture, forestry and fishing	1.58
Creative, arts and entertainment activities	0.63	Water transport (3)	1.52
Manufacture of fabricated metal products, except machinery and equipment	0.62	Archaeology	1.51
Manufacture of beverages	0.59	Crop and animal production, hunting and related service activities	1.49

Water collection, treatment and supply; Sewerage	0.54	Human health and social work activities	1.49
Manufacture of furniture	0.54	Land transport and transport via pipelines	1.48
Residential care activities	0.52	Accommodation and food service activities	1.48
Manufacturing	0.52	Residential care activities	1.43
Arts, entertainment and recreation	0.51	Construction of buildings; Specialised construction activities	1.36
Manufacture of rubber and plastic products	0.46	Food and beverage service activities	1.31
Land transport and transport via pipelines	0.46	Construction	1.18
Administrative and support service activities	0.42	Water collection, treatment and supply; Sewerage	1.16
Office administrative, office support and other business support activities	0.42	Administrative and support service activities	1.12
Accommodation and food service activities	0.40	Printing and reproduction of recorded media	1.11
Human health and social work activities	0.39	Creative, arts and entertainment activities	1.10
Other personal service activities	0.38	Security and investigation activities	1.08
Security and investigation activities	0.38	Other mining and quarrying	1.03
Remediation activities and other waste management services.	0.37	Retail trade, except of motor vehicles and motorcycles	1.01
Human health activities	0.37	Manufacture of motor vehicles, trailers and semi-trailers	0.98
Education	0.37	Repair and installation of machinery and equipment	0.96
Education	0.37	Public administration and defence; compulsory social security; education; human health and social work activities	0.94

Repair and installation of machinery and equipment	0.35	Other personal service activities	0.93
Wholesale and retail trade and repair of motor vehicles and motorcycles	0.35	Wholesale and retail trade; repair of motor vehicles and motorcycles	0.89
Public administration and defence; compulsory social security; education; human health and social work activities	0.33	Public administration and defence; compulsory social security	0.85
Food and beverage service activities	0.33	Sports activities and amusement and recreation activities	0.85
Water transport (3)	0.32	Manufacture of chemicals and chemical products	0.81
Civil engineering	0.31	Wholesale trade, except of motor vehicles and motorcycles	0.79
Public administration and defence; compulsory social security	0.31	Veterinary activities	0.78
Manufacture of motor vehicles, trailers and semi-trailers	0.30	Wholesale and retail trade and repair of motor vehicles and motorcycles	0.76
Information service activities	0.30	Manufacture of machinery and equipment n.e.c.	0.72
Retail trade, except of motor vehicles and motorcycles	0.29	Arts, entertainment and recreation	0.69
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.29	Manufacture of other transport equipment	0.67
Rental and leasing activities	0.29	Mining and quarrying	0.64
Printing and reproduction of recorded media	0.29	Social work activities without accommodation	0.63
Wholesale trade, except of motor vehicles and motorcycles	0.28	Office administrative, office support and other business support activities	0.62
Social work activities without accommodation	0.26	Manufacture of electrical equipment	0.62

Libraries, archives, museums and other cultural activities	0.26	Education	0.61
Mining and quarrying	0.26	Education	0.61
Electricity, gas, steam and air conditioning supply	0.25	Civil engineering	0.59
Manufacture of other transport equipment	0.24	Electricity, gas, steam and air conditioning supply	0.58
Manufacture of machinery and equipment n.e.c.	0.23	Telecommunications	0.57
Veterinary activities	0.23	Other service activities	0.53
Other service activities	0.23	Remediation activities and other waste management services.	0.53
Manufacture of electrical equipment	0.21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.47
Telecommunications	0.21	Repair of computers and personal and household goods	0.46
Manufacture of chemicals and chemical products	0.21	Programming and broadcasting activities	0.45
Motion picture, video and television programme production, sound recording and music publishing activities	0.20	Rental and leasing activities	0.43
Activities of membership organisations	0.13	Libraries, archives, museums and other cultural activities	0.40
Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.13	Information service activities	0.32
Manufacture of coke and refined petroleum products	0.11	Activities of membership organisations	0.24
Programming and broadcasting activities	0.11	Manufacture of coke and refined petroleum products	0.21
Manufacture of wearing apparel	0.09	Motion picture, video and television programme production, sound recording and music publishing activities	0.18

Gambling and betting activities	0.09	Manufacture of computer, electronic and optical products	0.17
Financial service activities, except insurance and pension funding	0.08	Gambling and betting activities	0.17
Other professional, scientific and technical activities	0.07	Real estate activities	0.17
Scientific research and development	0.07	Real estate activities	0.17
Information and communication	0.07	Information and communication	0.15
Real estate activities	0.07	Other professional, scientific and technical activities	0.14
Real estate activities	0.07	Manufacture of wearing apparel	0.14
Repair of computers and personal and household goods	0.06	Scientific research and development	0.13
Professional, scientific and technical activities	0.04	Financial service activities, except insurance and pension funding	0.12
Financial and insurance activities	0.04	Professional, scientific and technical activities	0.08
Legal and accounting activities	0.04	Financial and insurance activities	0.06
Insurance, reinsurance and pension funding, except compulsory social security	0.04	Travel agency, tour operator and other reservation service and related activities	0.04
Activities of head offices; management consultancy activities	0.04	Mining support service activities	0.04
Employment activities	0.04	Publishing activities	0.04
Mining support service activities	0.03	Insurance, reinsurance and pension funding, except compulsory social security	0.04
Advertising and market research	0.03	Activities of head offices; management consultancy activities	0.04

Manufacture of computer, electronic and optical products	0.03	Advertising and market research	0.03
Publishing activities	0.02	Legal and accounting activities	0.03
Travel agency, tour operator and other reservation service and related activities	0.02	Employment activities	0.02
Architectural and engineering activities; technical testing and analysis	0.01	Computer programming, consultancy and related activities	0.01
Computer programming, consultancy and related activities	0.01	Architectural and engineering activities; technical testing and analysis	0.01
	0.00	Activities auxiliary to financial services and insurance activities	0.01
Activities auxiliary to financial services and insurance activities	0		0.00

Table 13: Calculated Injury Frequency Rate for sectors based on the ASHE data.