



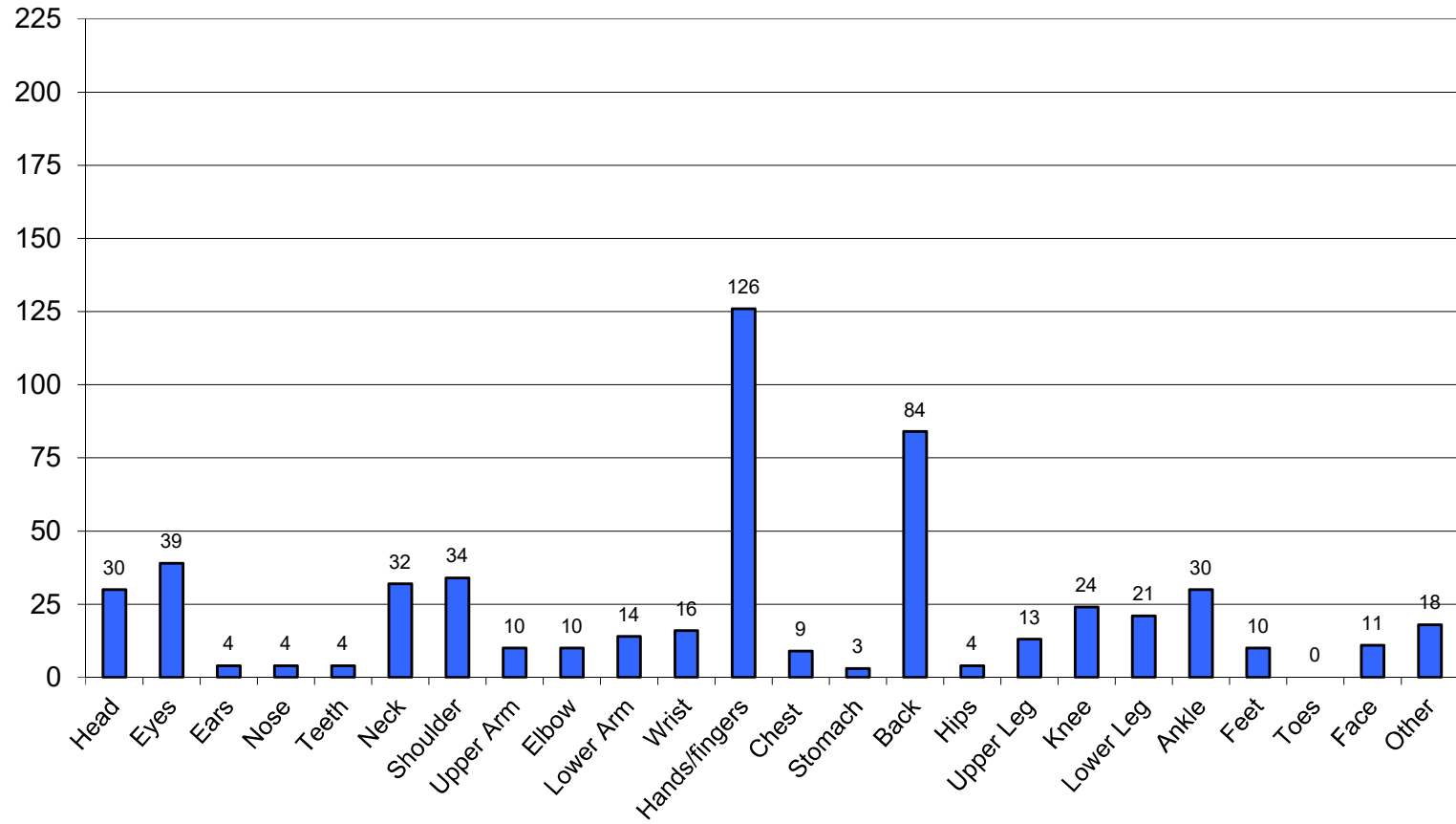
Injury Statistics
For Period January 1 to December 31, 2018

| | Total Hours | First Aids | First Aid Frequency | Medical Aids | Medical Aid Frequency | Lost Time Accidents | LTA Frequency |
|--------------|--------------------|-------------------|--------------------------------|---------------------|----------------------------------|--------------------------------|--------------------------|
| 31-Mar-18 | 11,055,923 | 98 | 1.77 | 32 | 0.58 | 2 | 0.04 |
| 30-Jun-18 | 10,513,620 | 97 | 1.85 | 15 | 0.29 | 5 | 0.10 |
| 30-Sep-18 | 10,132,934 | 90 | 1.78 | 24 | 0.47 | 1 | 0.02 |
| 31-Dec-18 | 10,563,813 | 101 | 1.91 | 21 | 0.40 | 2 | 0.04 |
| Total | 42,266,289 | 386 | 1.83 | 92 | 0.44 | 10 | 0.05 |

Historical

| | |
|------|------|
| 2017 | 0.08 |
| 2016 | 0.07 |
| 2015 | 0.08 |
| 2014 | 0.13 |
| 2013 | 0.07 |
| 2012 | 0.10 |
| 2011 | 0.15 |
| 2010 | 0.10 |
| 2009 | 0.15 |
| 2008 | 0.25 |
| 2007 | 0.18 |

AMSA Injury Type Survey Period January 1 to December 31, 2018



January 21, 2019

| COMPANY | 2017 | | 2016 | | 2015 | | 2014 | | 2013 | | 2012 | | 2011 | | 2010 | | 2009 | | 2008 | | 2007 | | |
|-----------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|------|
| | LTA | | LTA | | LTA | | LTA | | LTA | | LTA | | LTA | | LTA | | LTA | | LTA | | LTA | | |
| | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | Frequenc y | Severity | |
| Canadian Natural Albian Sands | 0.00 | 0.00 | 0.03 | 0.00 | 0.12 | 0.00 | 0.11 | 0.00 | 0.08 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.11 | 1.34 | 0.49 | 0.00 | 0.18 | 5.30 | |
| Canadian Natural Resources | 0.04 | 0.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 4.83 | 0.16 | 5.34 | 0.00 | 0.00 | 0.38 | 17.65 | 0.40 | 3.82 | 0.00 | 0.00 | 0.19 | 39.43 | 0.00 | 0.00 | |
| Teck Coal - Cardinal River Ops. | 0.43 | 22.01 | 0.26 | 9.51 | 0.58 | 16.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 10.42 | 0.49 | 17.23 | 0.00 | 9.95 | 0.67 | 7.67 | 1.57 | 49.94 | 0.66 | 34.96 | |
| Aecon Mining | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| Graham Earthworks | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 8.55 | 0.00 | 0.00 | | | | | | | | | | | | | |
| Grande Cache Coal Corporation * | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.62 | 6.12 | 2.11 | 61.41 | 0.95 | 14.96 | n/a | n/a | | |
| Graymont | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.70 | 47.02 | |
| Hammerstone | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| Imperial - Kearl | 0.08 | 0.21 | 0.00 | 0.00 | 0.08 | 0.32 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| KMC Mining | 0.16 | 4.93 | 0.27 | 5.30 | 0.00 | 0.00 | 0.29 | 5.54 | 0.00 | 0.00 | 0.10 | 1.06 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 11.36 | 0.21 | 0.00 |
| Ledcor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Lehigh Cement Ltd. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Westmoreland - Coal Valley | 0.29 | 0.88 | 0.44 | 21.06 | 0.90 | 19.17 | 0.55 | 0.82 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 15.35 | 0.20 | 9.78 | 0.00 | 6.48 | 0.26 | 4.18 | | |
| Westmoreland - Obed | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| Westmoreland - Genesee | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.69 | 18.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.83 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Westmoreland - Paintearth | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 | 54.05 | 0.00 | 0.00 | 109.77 | 0.77 | 86.60 | 0.00 | 0.00 | 0.00 | 0.00 | 1.01 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Westmoreland - Sheerness | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Sun Hills - Whitewood ** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| North American Construction Group | 0.00 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 3.22 | 0.00 | 0.00 | 0.18 | 9.52 | 0.07 | 10.25 | 0.07 | 1.10 | 0.00 | 0.00 | 0.00 | 15.48 | 0.00 | 0.00 | |
| Suncor | 0.13 | 7.36 | 0.10 | 11.69 | 0.07 | 2.20 | 0.09 | 8.29 | 0.00 | 0.00 | 0.09 | 4.54 | 0.19 | 5.52 | 0.13 | 1.97 | 0.14 | 2.02 | 0.36 | 6.33 | 0.00 | 0.00 | |
| Sun Hills - Highvale Mine | 0.11 | 0.33 | 0.13 | 0.52 | 0.25 | 1.37 | 0.24 | 1.19 | 0.51 | 0.77 | 0.16 | 1.46 | 0.64 | 9.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 3.01 | 0.36 | 15.85 | |
| Synchrude Canada Ltd. | 0.11 | 1.12 | 0.06 | 4.65 | 0.00 | 0.00 | 0.09 | 4.30 | 0.02 | 4.39 | 0.10 | 3.86 | 0.05 | 0.00 | 0.06 | 3.67 | 0.03 | 1.71 | 0.00 | 0.00 | 0.21 | 7.82 | |
| TOTALS | 0.08 | 1.97 | 0.07 | 4.44 | 0.08 | 1.52 | 0.13 | 3.64 | 0.07 | 2.81 | 0.10 | 3.70 | 0.15 | 4.29 | 0.10 | 2.28 | 0.15 | 4.43 | 0.25 | 8.96 | 0.18 | 6.00 | |

Frequency = (200,000 / Manhours Worked) x LTA's
 Severity = (200,000 / Manhours Worked) x Lost Workdays
 Disabling Injury Index = (Frequency x Severity) / 1,000

NOTE: Due to varied methods of statistical calculations, it is not possible or desired to compare experience against one another.

* GCC - in care and maintenance mode as of January 1, 2016 - no stats until further notice
 ** Commencing January 1, 2011 - Stats for Whitewood are included with Highvale.

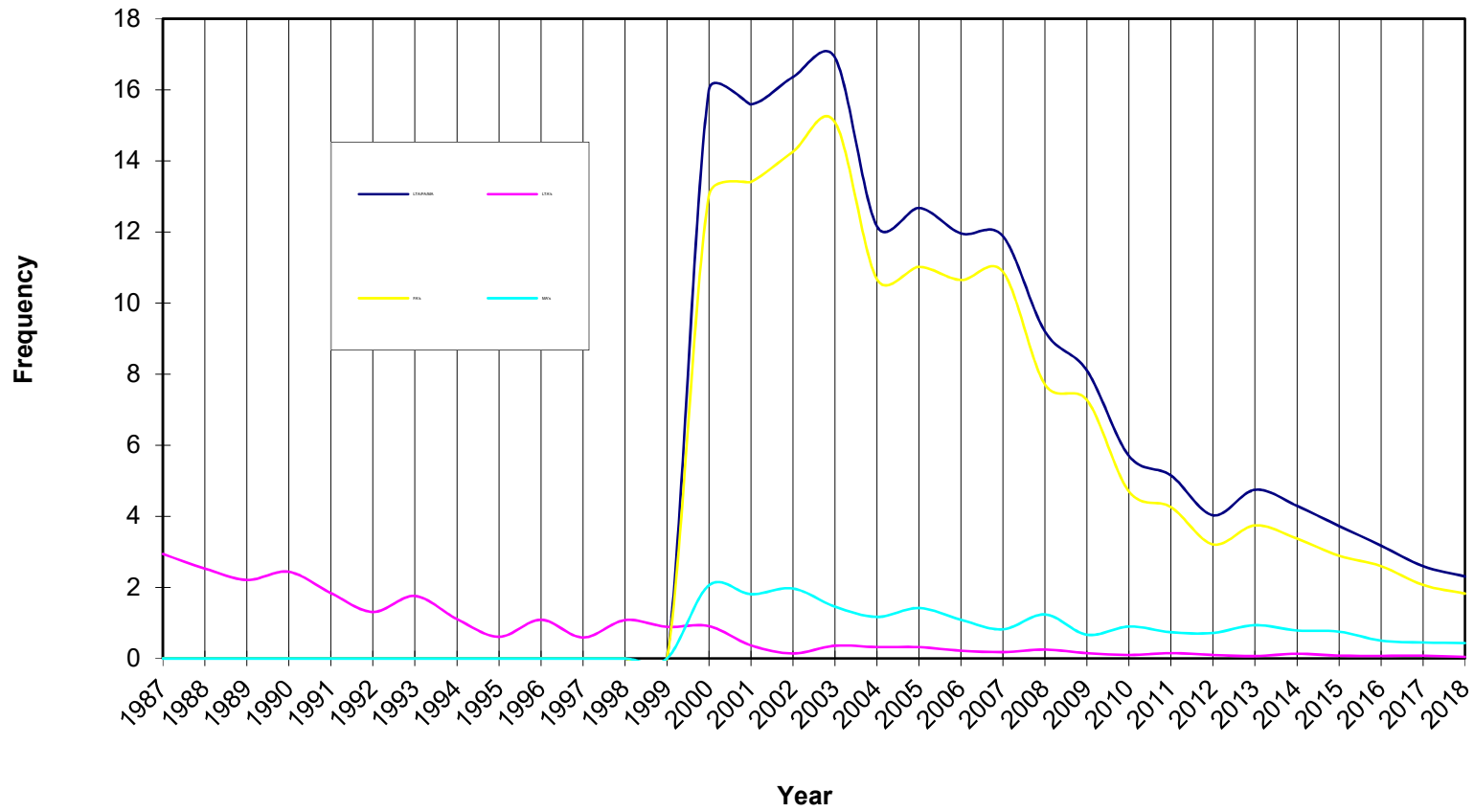
First Aid Injury - Minor injuries that do not require treatment only by a physician. May include treatment at a hospital due to location or convenience but not necessarily requires a physician.

Medical Aid Injury - Not a minor Injury in nature that requires medical treatment only by a physician. It may include the need for prescriptions medication. Pain medication prescribed for patient comfort does not constitute medical treatment, nor does x-rays used for diagnostic purposes that are negative. Visits to a medical facility on a precautionary basis that does not result in the need for medical treatment is deemed a First Aid.

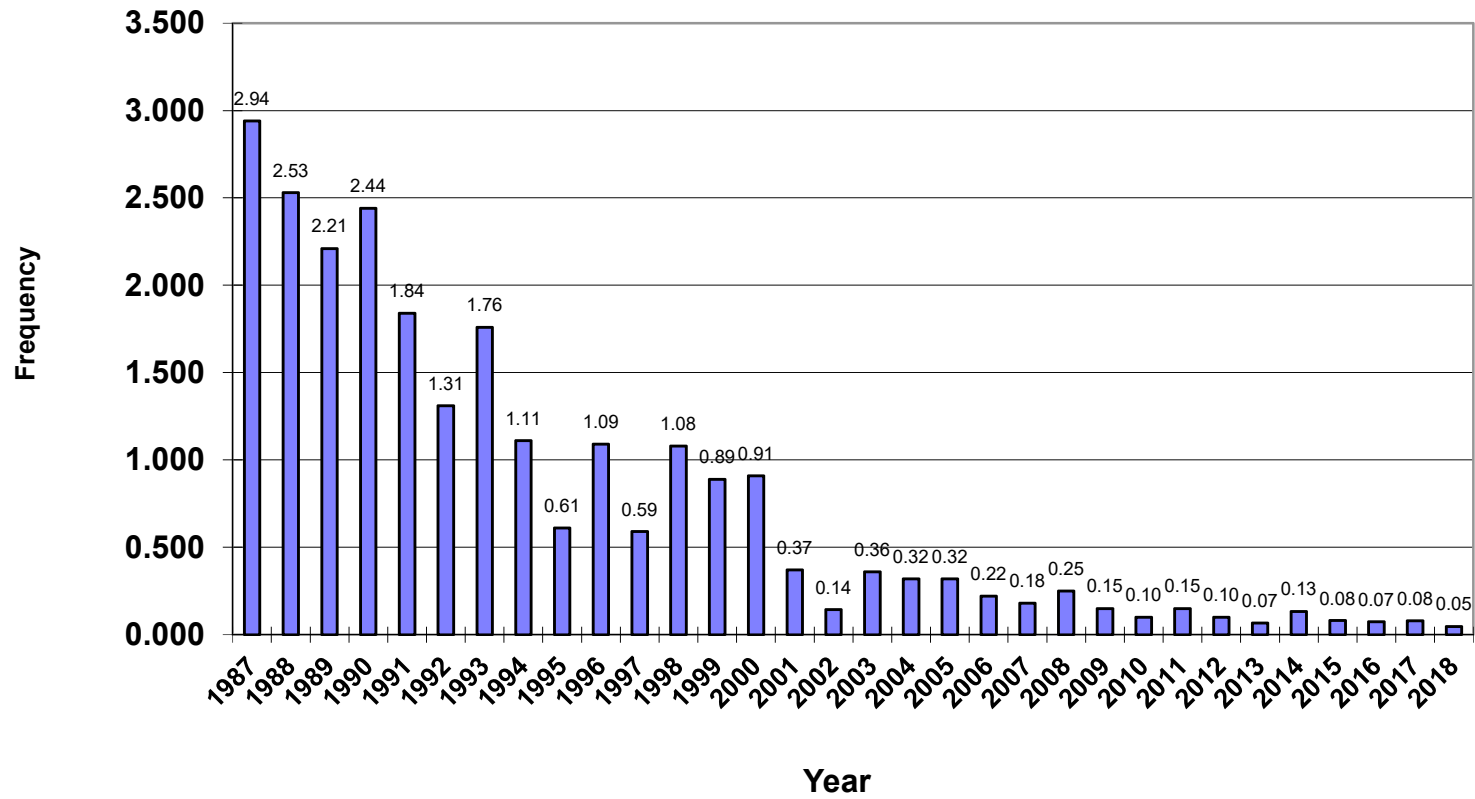
Lost Time Injury - An injury that prevents a worker from returning to their next scheduled work shift. Missing time due to admission to a medical facility, medical treatment that keeps a worker away from their duties or lack of modified work constitutes a lost time. It is not a lost time if modified work has been recommended by the treating physician and refused by the worker.

Contractor Reporting - If a contractor's exposure hours are included in your site reporting then their stats, as per the above classifications, must be included in your report. If your contractors are members of AMSA and reporting their own hours and stats for your location then you must exclude them from yours.

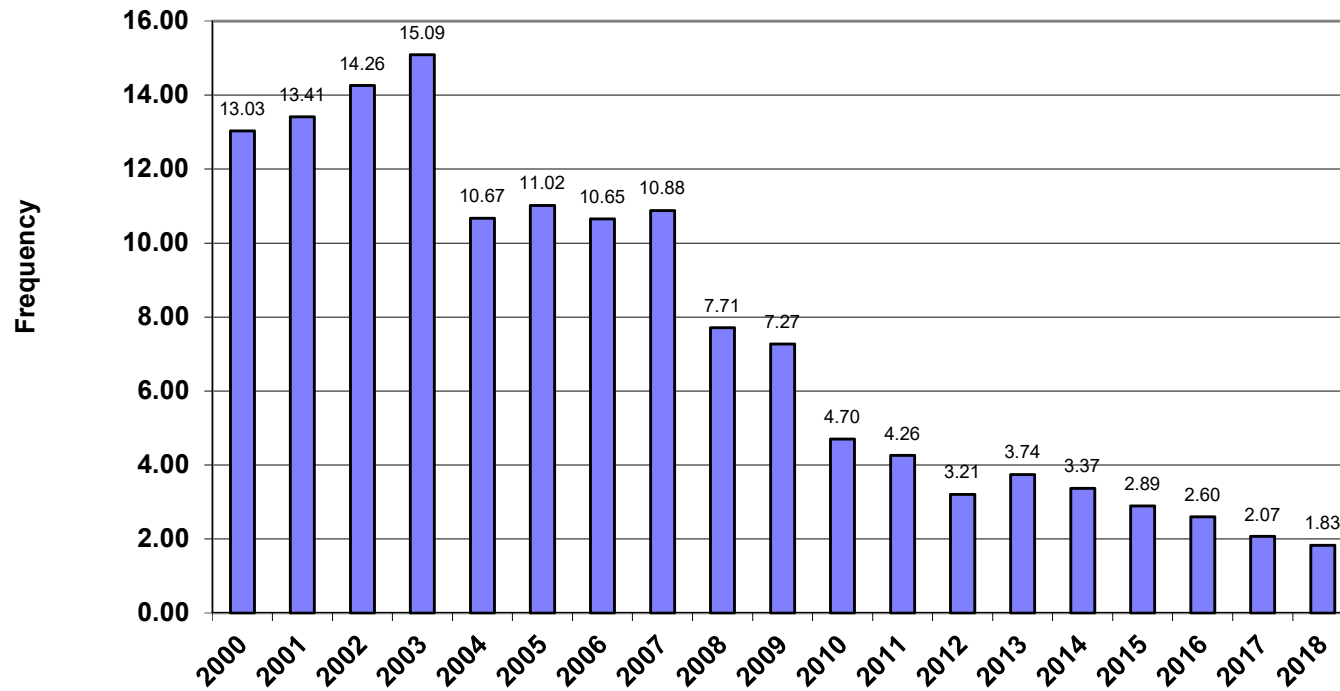
Alberta Mine Safety Association Combined Comparison 1987 - December 31, 2018



Alberta Mine Safety Association LTA Frequency Comparison 1987 - December 31, 2018



Alberta Mine Safety Association First Aid Frequency Comparison 2000 - December 31, 2018



**Alberta Mine Safety Association
Medical Aid Frequency Comparison
2000 - December 31, 2018**

