

Workers' compensation database

Key findings

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In 2009, Milliman created a workers' compensation database using data gathered from Milliman offices across the country. Since then, we have continued to update the database every other year. We have compiled the key findings from our 2019 update below.

Report pattern

As shown in Figure 1, the unlimited incurred loss pattern continues to accelerate. The lines on the graph represent the incurred loss pattern from each of the updates to our workers' compensation database since 2013. For a given claim age along the x-axis, we have continued to see an increase to the percentage of ultimate losses incurred as of that point in time.

FIGURE 1: INCURRED LOSS PATTERN, UNLIMITED

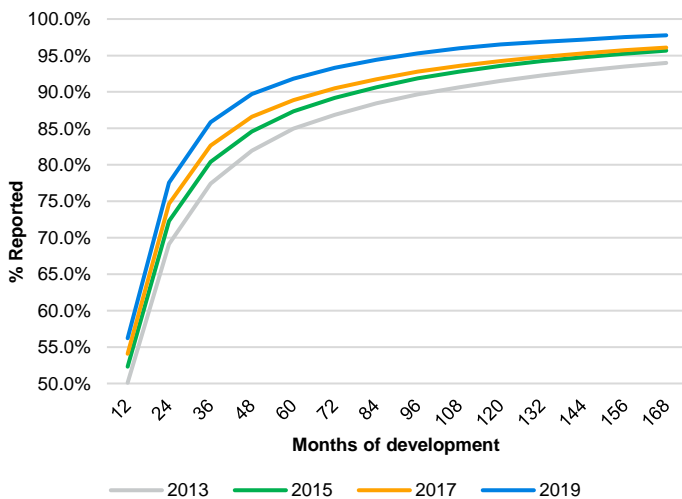


Figure 2 shows the same graph, but limited to \$250,000 per occurrence. Though less distinct than the unlimited graph, we see the same trend of an accelerating loss pattern here as well.

FIGURE 2: INCURRED LOSS PATTERN, \$250,000 LIMIT

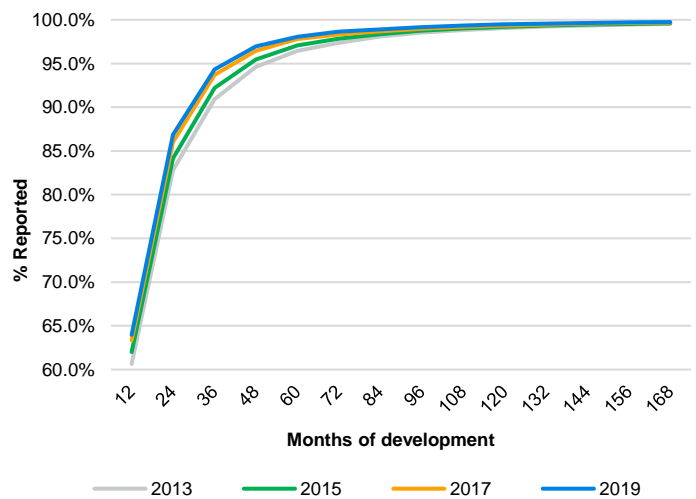
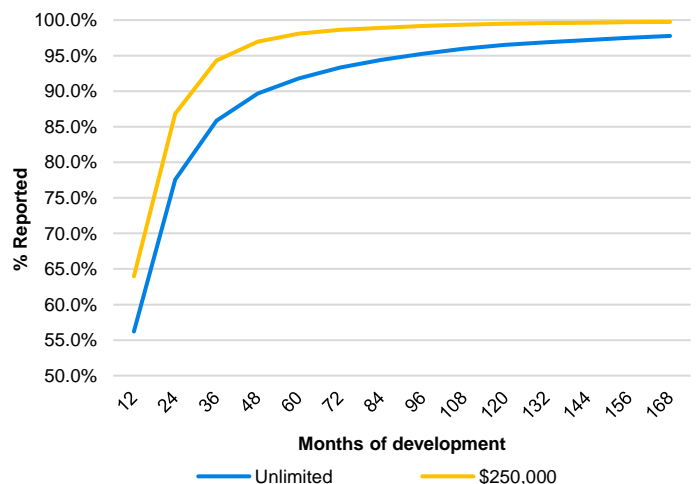


Figure 3 compares the reporting pattern on an unlimited basis to the pattern limited to \$250,000. As expected, losses limited to \$250,000 develop to ultimate much quicker than on an unlimited basis.

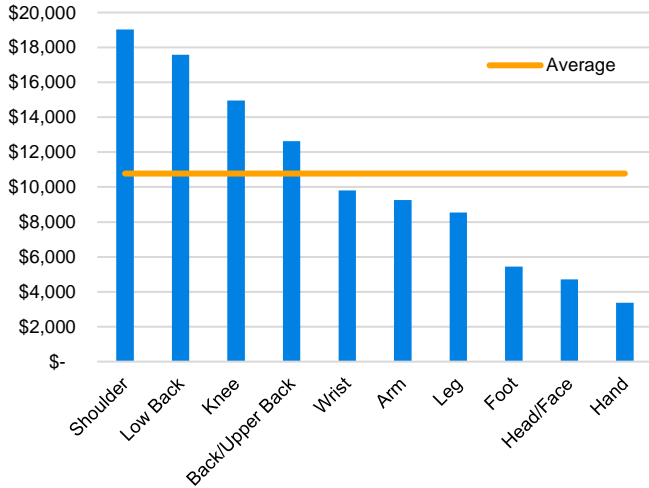
FIGURE 3: INCURRED LOSS PATTERN, UNLIMITED, AND \$250,000 LIMIT



Body part analysis

Figure 4 shows average untrended incurred loss and allocated loss adjustment expenses (ALAE) severity by body part for claims occurring in 2000 and forward. The body parts shown in this graph are the 10 with the highest frequency appearing in our database; the graph is then sorted by average severity.

FIGURE 4: AVERAGE CLAIM SEVERITY BY BODY PART, HIGH-FREQUENCY BODY PARTS



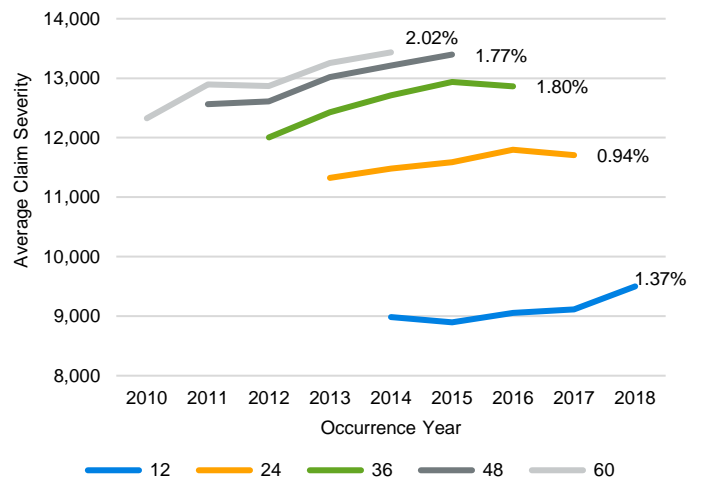
Over this time period, the severity of shoulder injuries is 77% higher than the average claim severity. Additionally, the severity of shoulder injuries is on the rise. Recent shoulder injury claim severity trend is approximately one percentage point higher than the industrywide claim severity trend.

While shoulder injury claim severity is on the rise, low back claim severity has shown a decline. The low back severity trend is more than three percentage points lower than the industrywide severity trend for the same time period. The frequency for low back claims is also on the decline. Compared to 2010-2015, low back claims in 2016-2018 have decreased by 15% as a percentage of overall claims.

Severity trend

Figure 5 shows average incurred loss and ALAE severity as of a given number of months of maturity. The trend at each maturity, based on an exponential fit to the last five years of data, is shown to the right of each line.

FIGURE 5: AVERAGE CLAIM SEVERITY BY MONTHS OF MATURITY



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