



# Analysis of the MEDEX HCO Program: Summary

*Presented to*

MEDEX



Mr. David Kim, COO  
MEDEX  
2618 San Miguel Drive, #477  
Newport Beach, CA 92660

Re:

Dear Mr. Kim:

Using the client data provided, we have reviewed the workers' compensation experience for before and after the 11/7/2011 entry into the MEDEX HCO program. In general, we found that the experience under the HCO program is trending towards lower costs per claim and lower frequencies than the experience prior to entering the program.

In preparing this analysis, we used the following definition of indemnity and medical only claims:

*Medical only claims are defined as claims with no indemnity incurred, regardless of the coding in the loss run. This definition has the advantage of eliminating differences caused by varying thresholds among entities and third-party administrators for reclassifying large medical only claims as indemnity. The designation was based on the 11/6/2015 data.*

The analysis focuses on the three years before and after the conversion date, at 12 and 24 months of development. Given the recent conversion date, losses are not compared on an ultimate basis. Claims with no losses were excluded from the analysis. This analysis does not take into account changes in benefit levels.

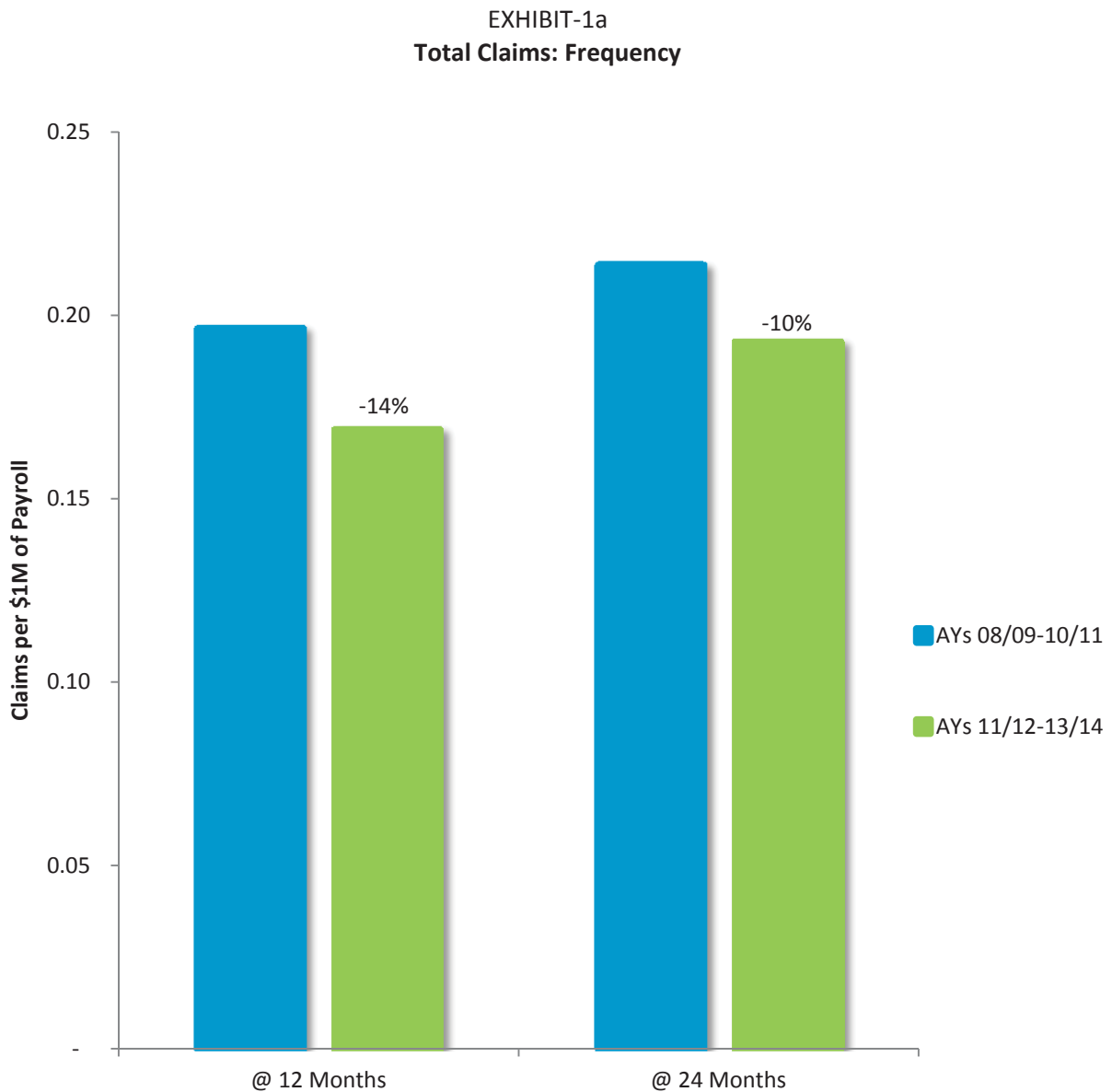
The following table outlines the data used for :

Accident Year	Dates of Loss	Evaluation Date	
		At 12 Months of Development	At 24 Months of Development
2008/09	11/7/2008-11/6/2009	11/6/2009	11/6/2010
2009/10	11/7/2009-11/6/2010	11/6/2010	11/6/2011
2010/11	11/7/2010-11/6/2011	11/6/2011	11/6/2012
2011/12	11/7/2011-11/6/2012	11/6/2012	11/6/2013
2012/13	11/7/2012-11/6/2013	11/6/2013	11/6/2014
2013/14	11/7/2013-11/6/2014	11/6/2014	11/6/2015

The following charts display comparisons of the claims data before and after entry into the MEDEX HCO program. The averages shown in the graphs are the weighted average of the three years before joining the MEDEX program and the weighted average of the three years after. Note that a glossary is provided at the end of this document for clarification of some of the terms and statistics discussed.

### Frequency

The following chart shows the frequency of claims per \$1M of payroll. This comparison includes all indemnity and medical only claims. As shown below, the weighted average of the three accident years since joining MEDEX shows a 10% reduction in the frequency of claims at 24 months of development.



When broken down into indemnity and medical only claims, indemnity claims have shown a greater decrease in claims frequency. The frequency of medical only claims has increased since joining MEDEX. This would be expected given the decrease in indemnity claims frequency as fewer claims are incurring time-loss costs.

EXHIBIT-1b  
Indemnity Claims: Frequency

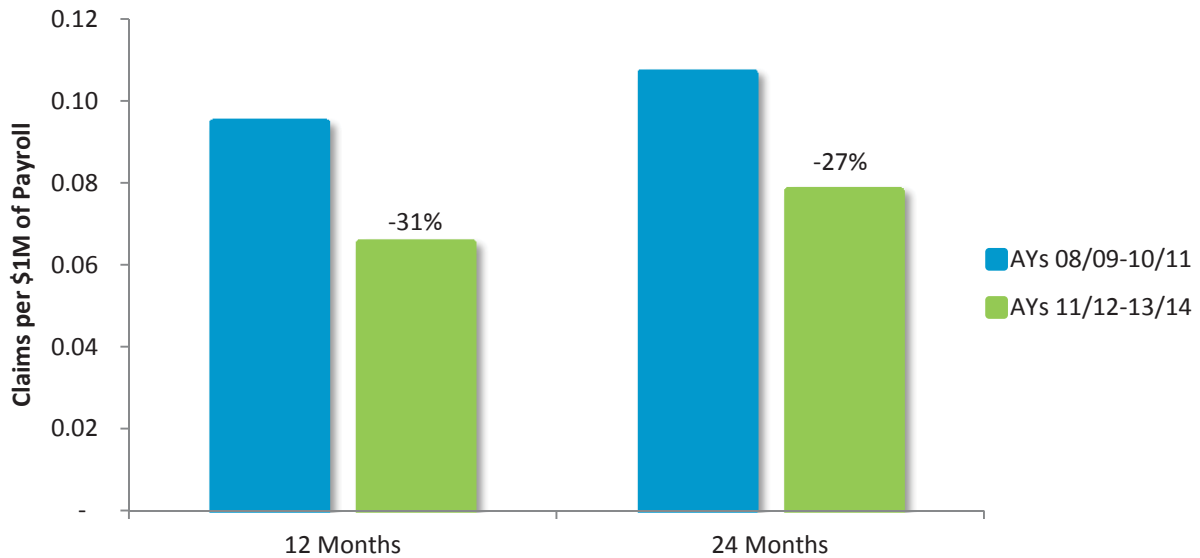
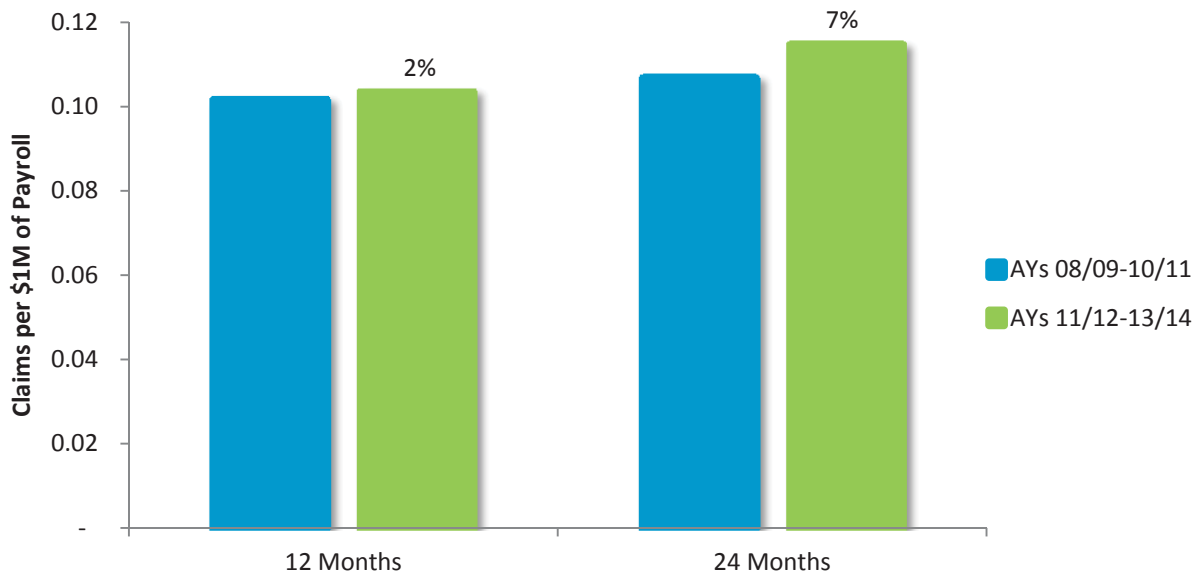


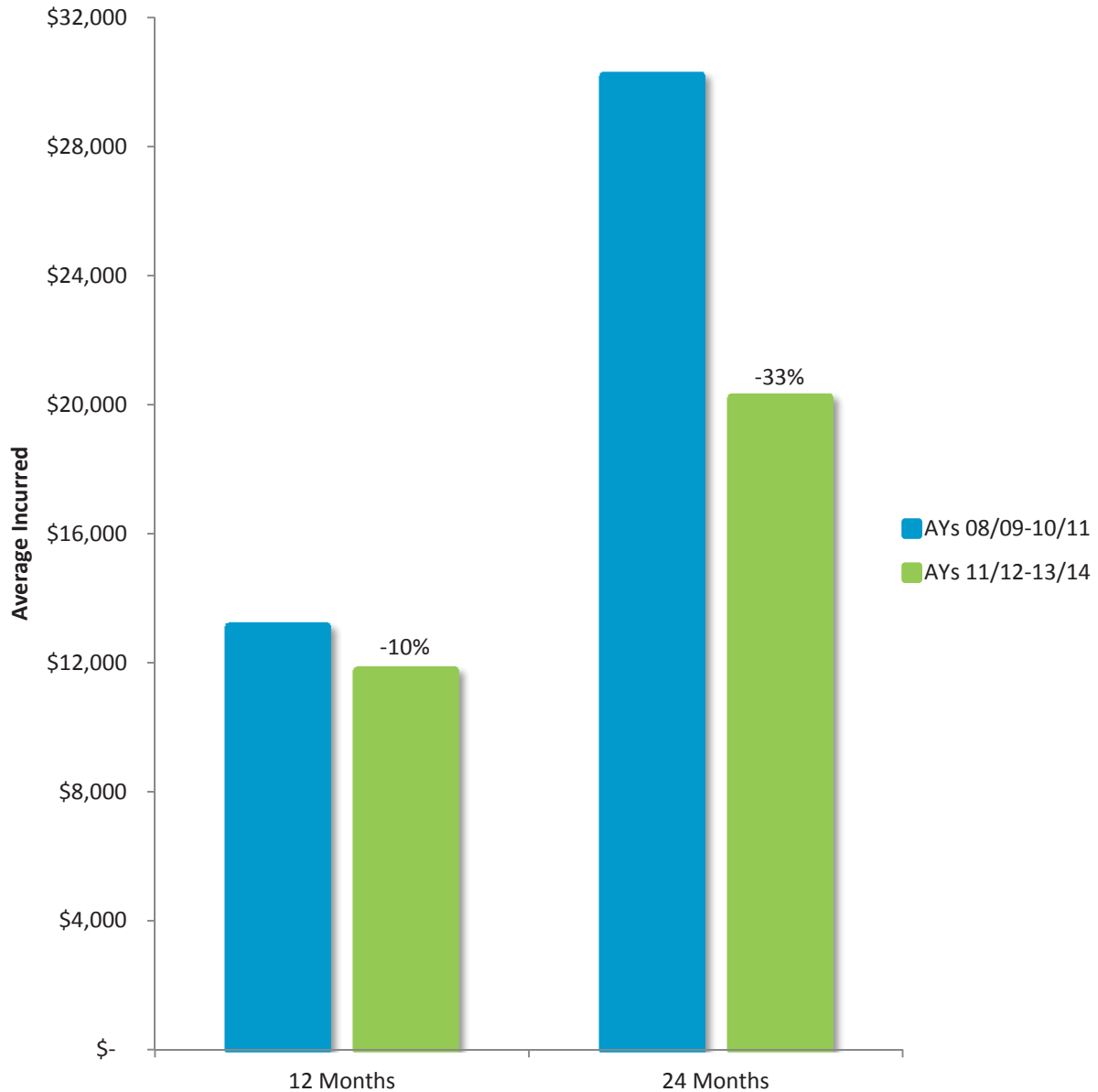
EXHIBIT-1c  
Medical Only Claims: Frequency



## Average Cost Per Claim

The following chart shows the average loss and ALAE per claim. This comparison includes all indemnity and medical only claims. The average cost per claim at 24 months of development shows a 33% reduction since joining MEDEX.

EXHIBIT-2a  
Total Claims: Average Loss & ALAE per Claim



When broken down into indemnity and medical only claims, medical only claims have shown a greater improvement in claims severity. Although the frequency of medical only claims has increased (see Exhibit 1-c), the severity of the claims has been reduced by 26% at 24 months. Indemnity claims have also shown a significant reduction of 18%.

EXHIBIT-2b  
Indemnity Claims: Average Loss & ALAE per Claim

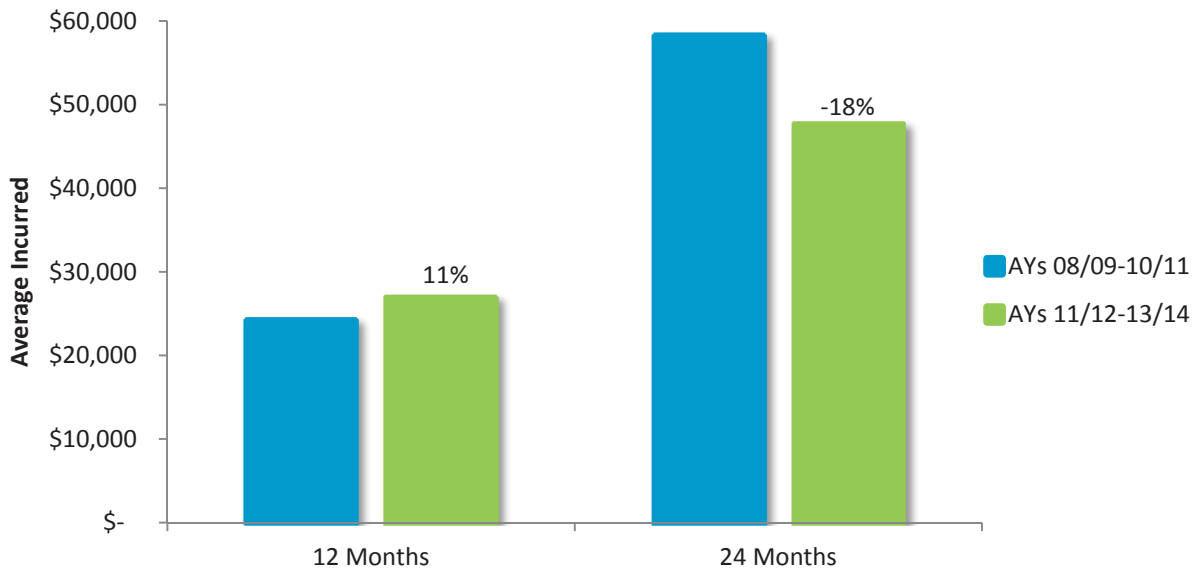
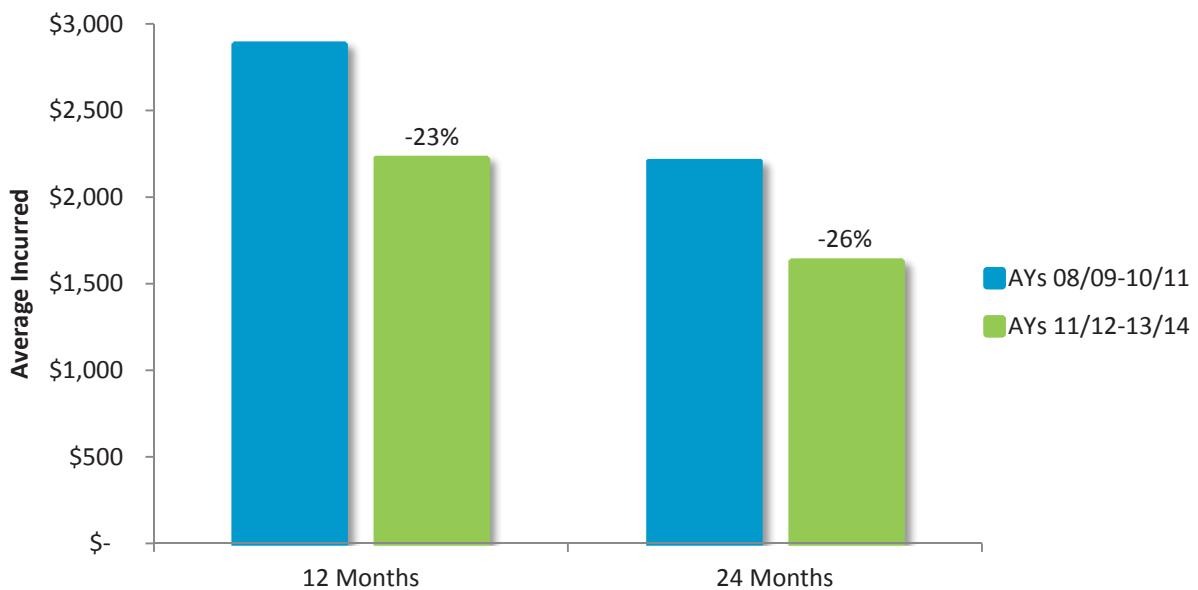
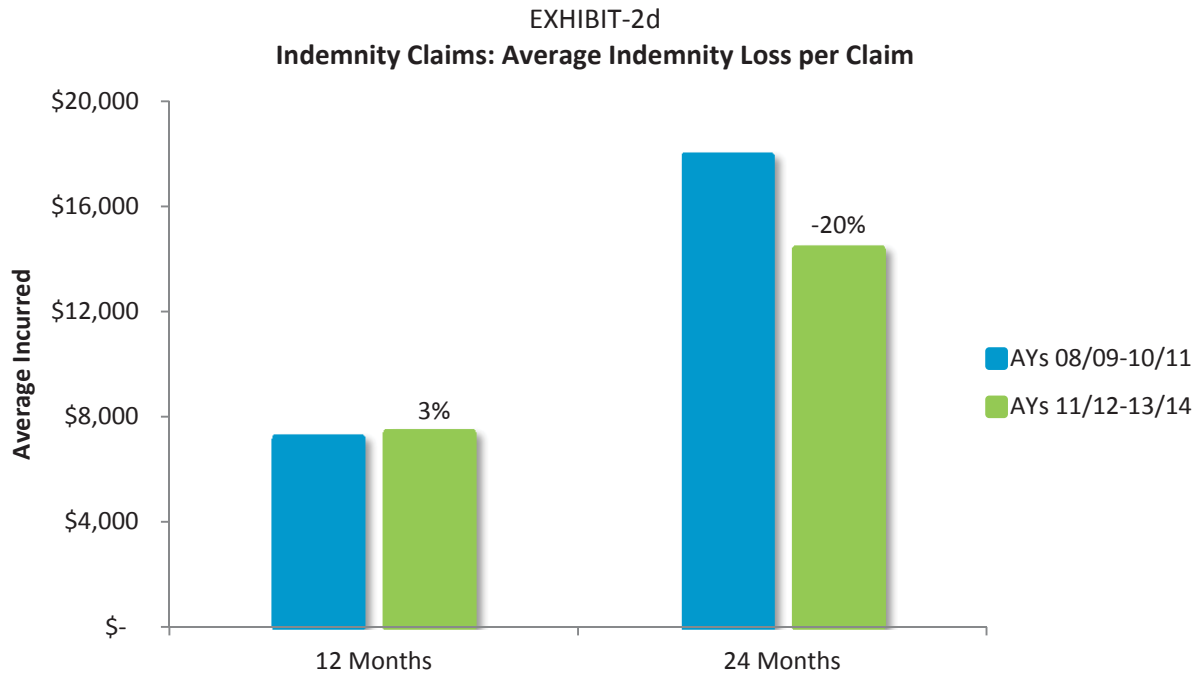


EXHIBIT-2c  
Medical Only Claims: Average Loss & ALAE per Claim



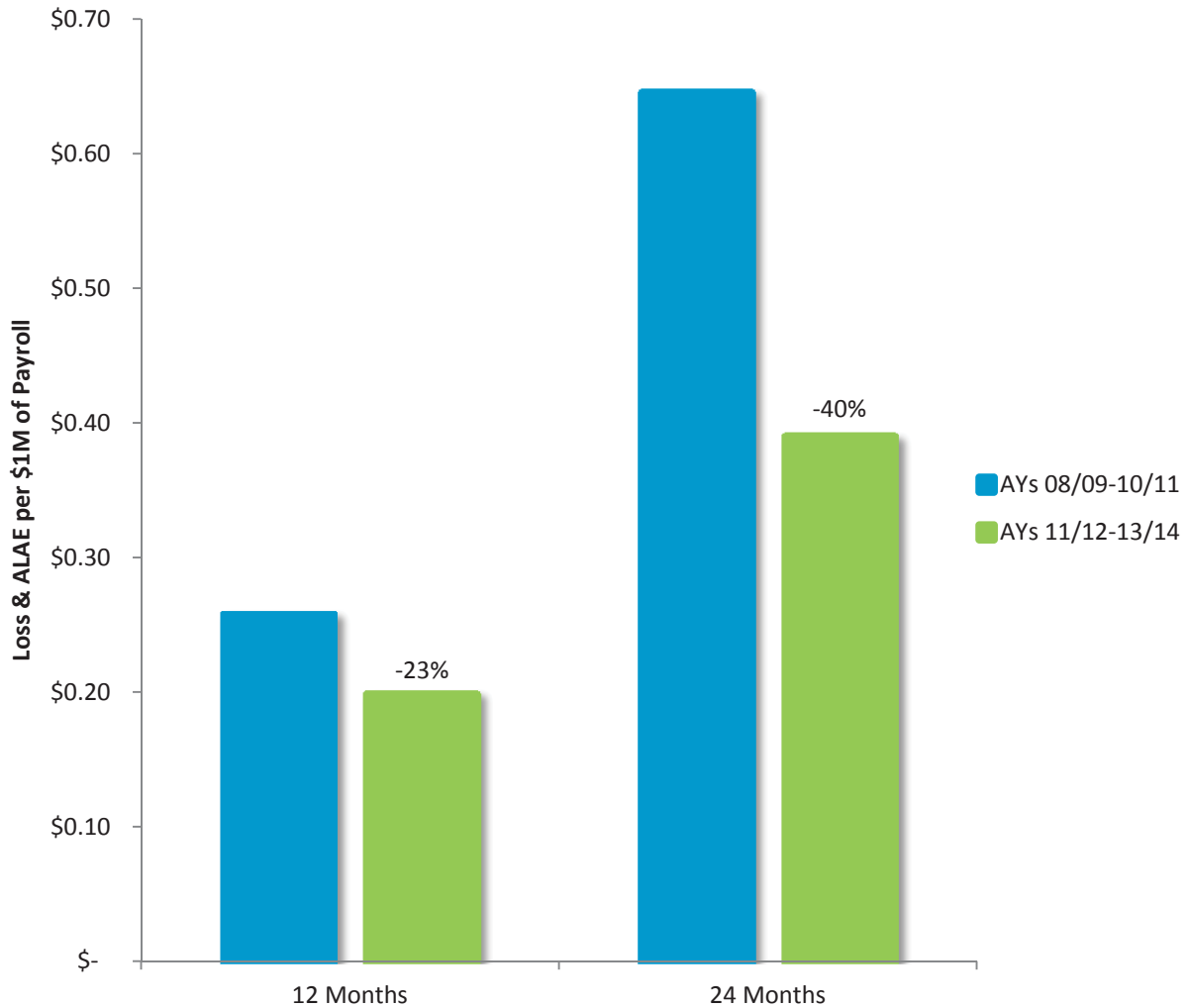
When indemnity payments on indemnity claims are considered, data indicates a 20% savings under the MEDEX program at 24 months.



## Loss Rate

The following chart shows the loss and ALAE rate (per \$1M of payroll). This comparison includes all indemnity and medical only claims. The loss and ALAE rate at 24 months has experienced a significant decrease of 40% since joining MEDEX.

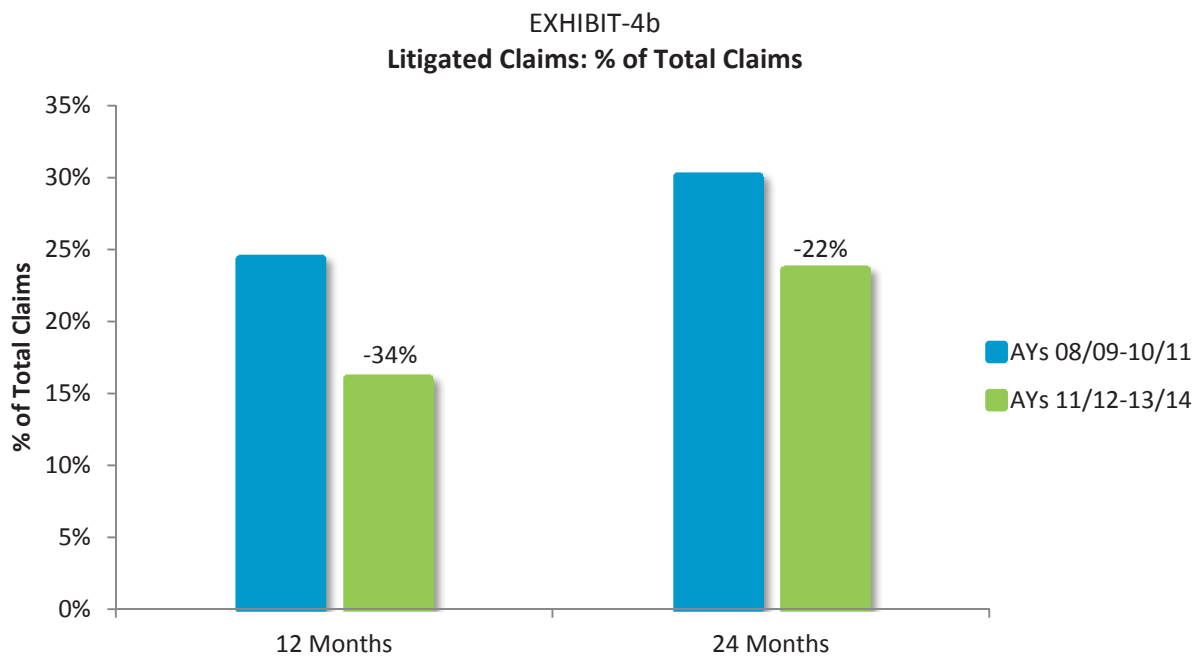
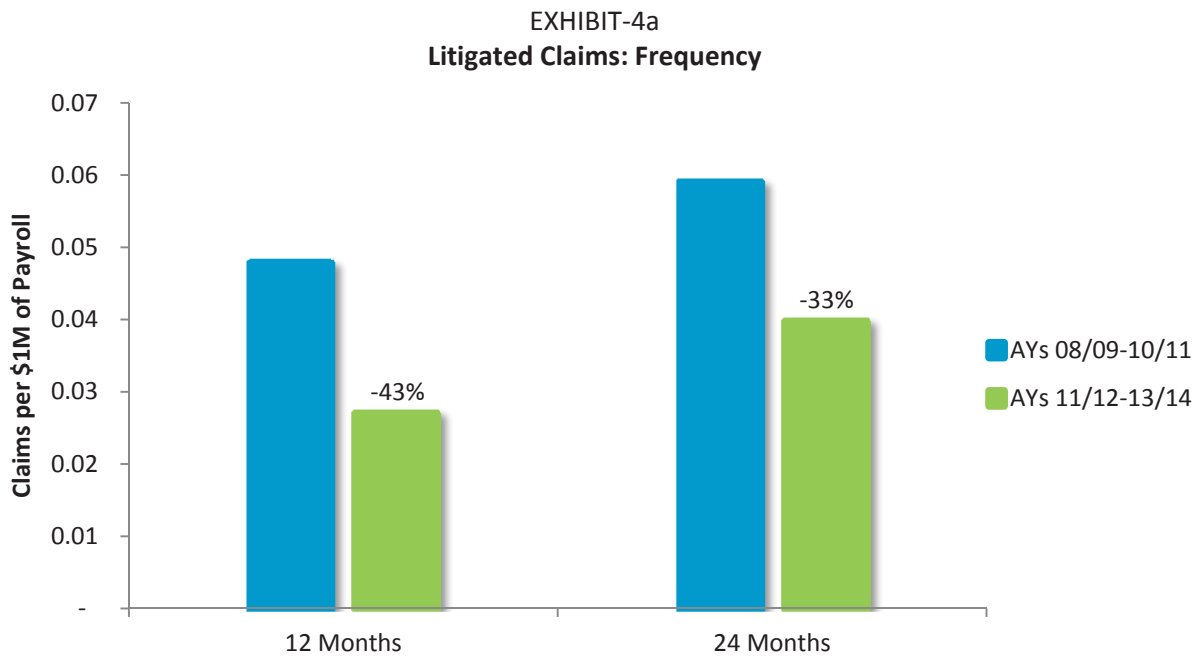
EXHIBIT-3a  
Total Claims: Loss & ALAE Rate





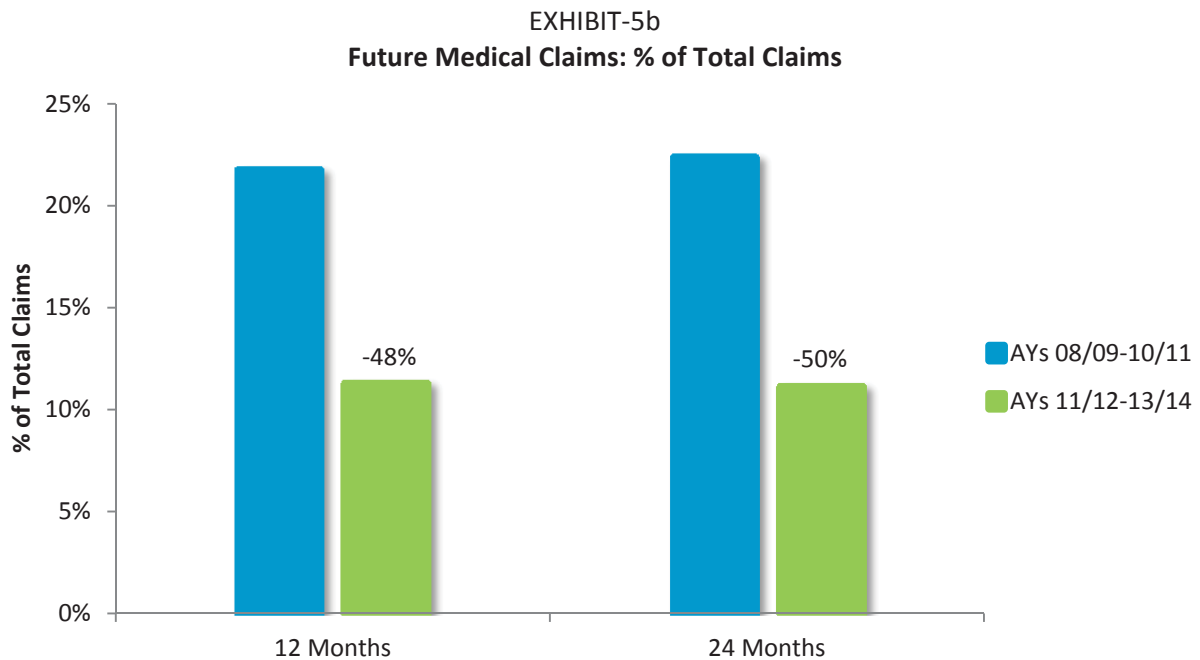
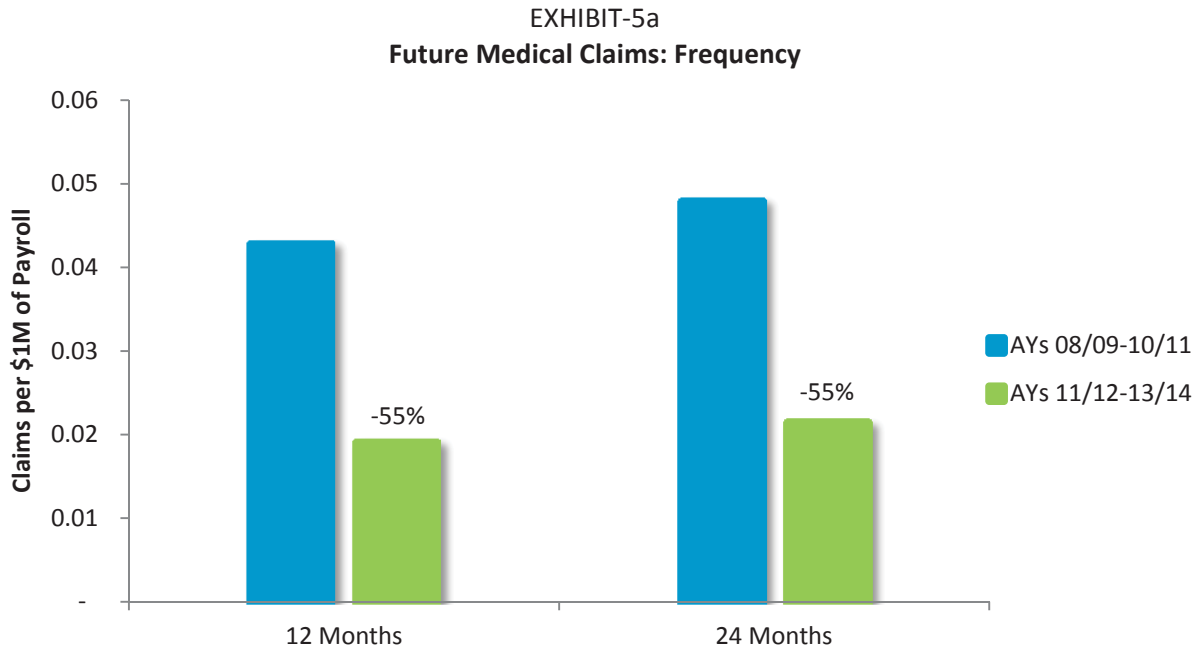
## Litigated Claims

The following charts show the frequency of litigated claims (per \$1M of payroll), as well as the percent of total claims that are litigated. The frequency of litigated claims has shown more of an improvement (-33%) under the MEDEX program than the overall claims frequency (-10%, see Exhibit 1a). This is due to a reduction in the percent of total claims that are litigated. As a comparison, California civil filings in total decreased approximately 13% over the same period.



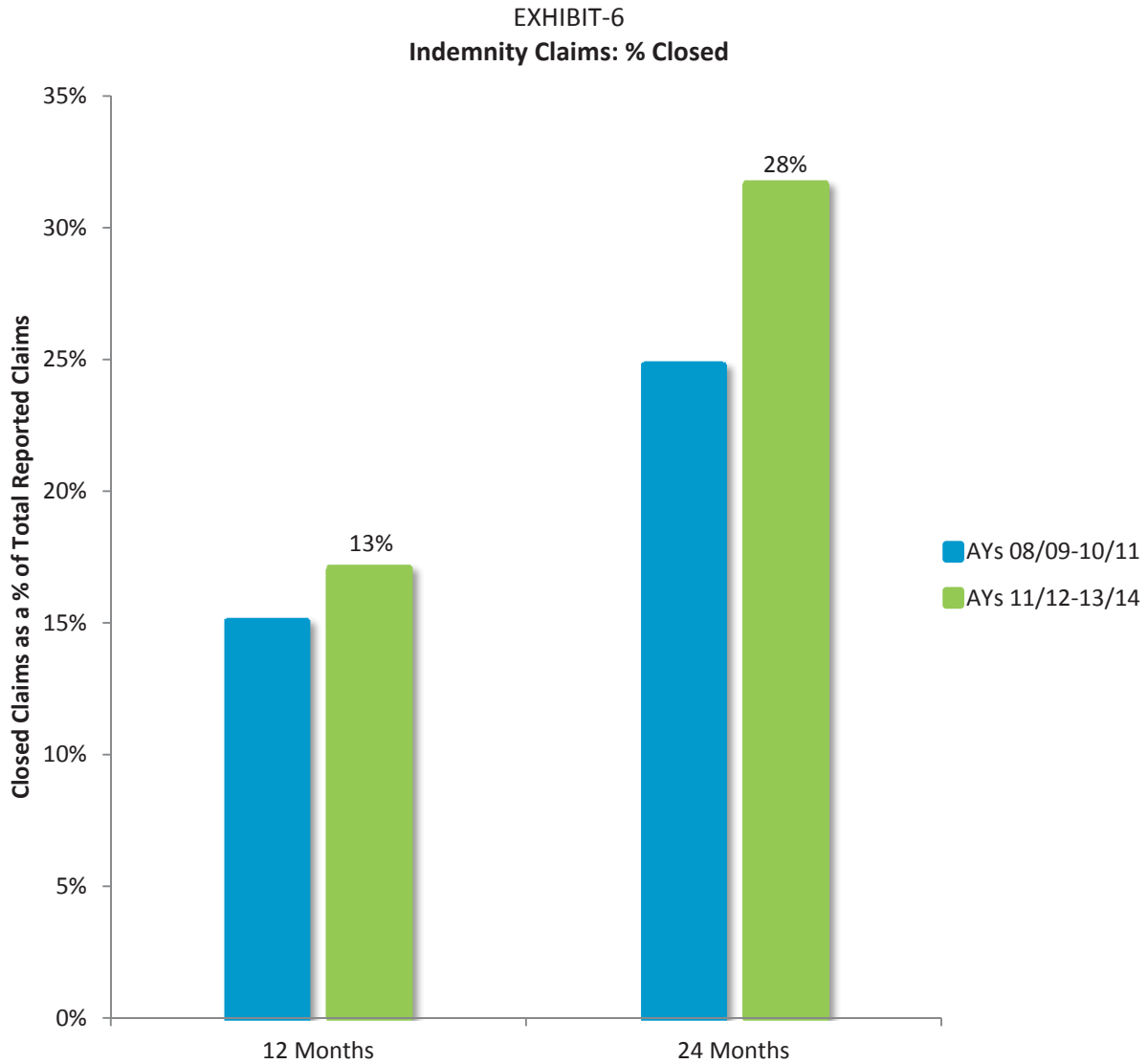
## Future Medical Claims

The following charts show the frequency of future medical claims (per \$1M of payroll), as well as the percent of total claims that are designated as future medical. The frequency of future medical claims has experienced a significant improvement (55%) under the MEDEX program. The percent of total claims that are designated as future medical has been reduced by 50%.



## Closed Claims

The following chart shows the percentage of total reported indemnity claims that are closed. At 24 months of development, a higher percentage of claims have been closed under the MEDEX program as compared to the years before joining the program.

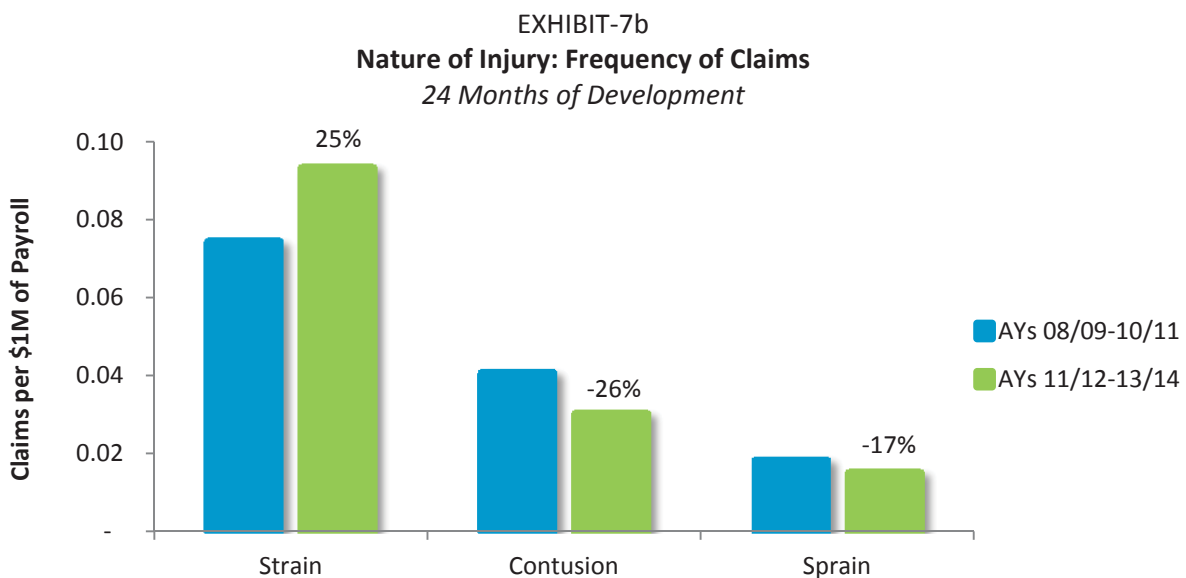
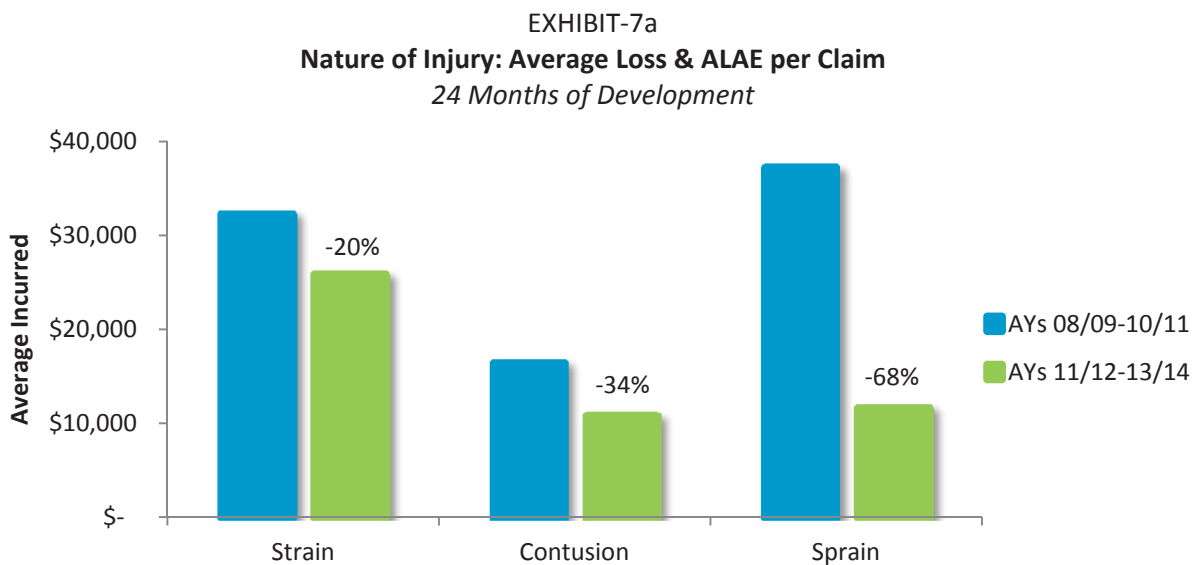


## Injury Breakdowns

The following charts break the data set down into most frequent injury types. It should be noted that once the claim types are refined to this degree the statistics are calculated on a fairly small data set, which decreases the credibility of the results.

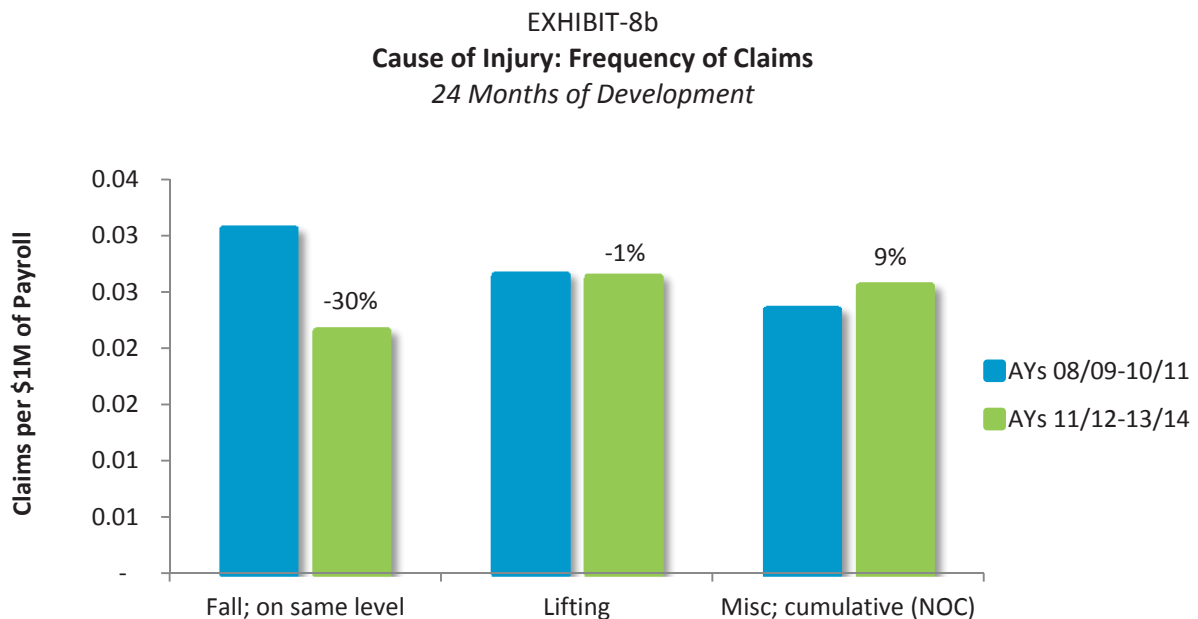
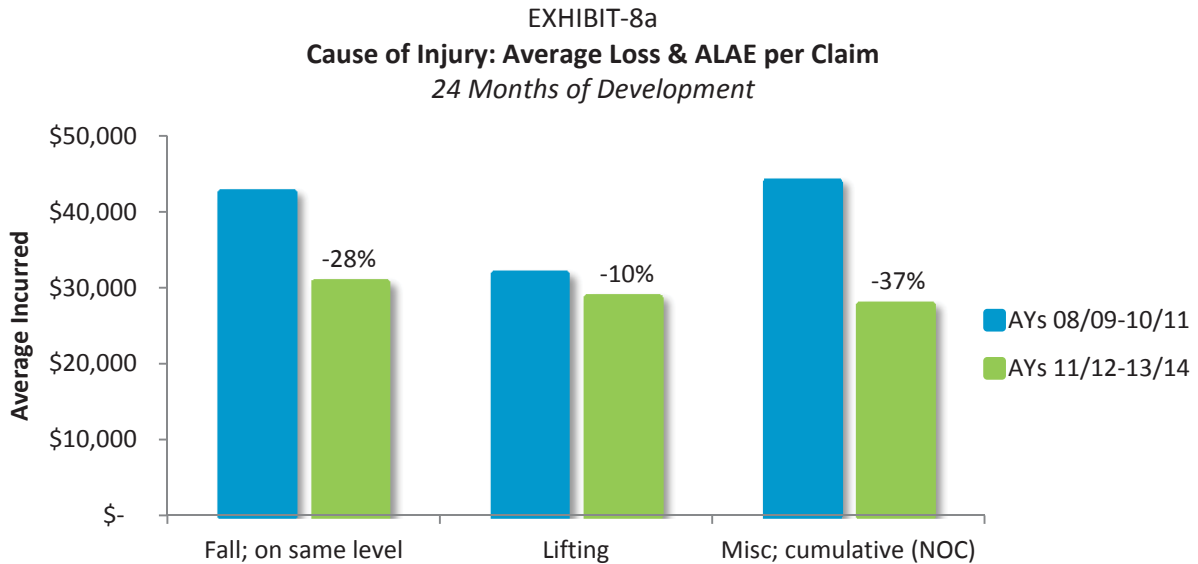
## Nature of Injury

The following charts show the average incurred and frequency of claims at 24 months of development for the three natures of injury with the highest frequency of claims prior to MEDEX. This comparison includes all indemnity and medical only claims and includes losses and ALAE. For all three injury types, MEDEX claims have a lower average incurred than pre-MEDEX claims.



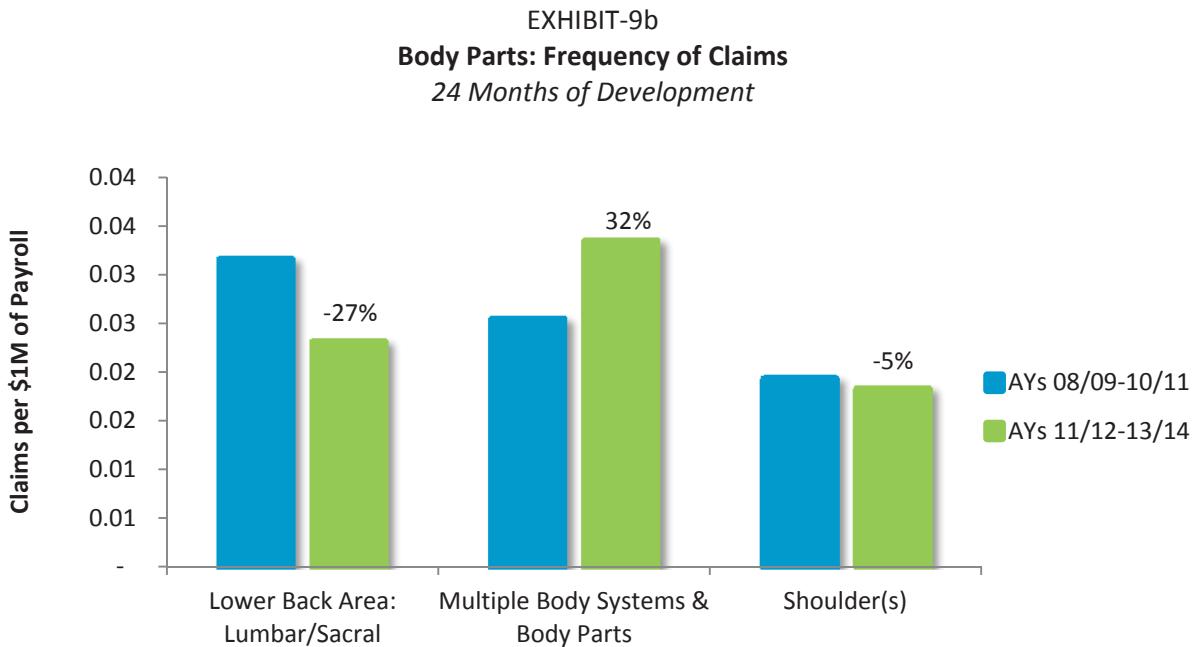
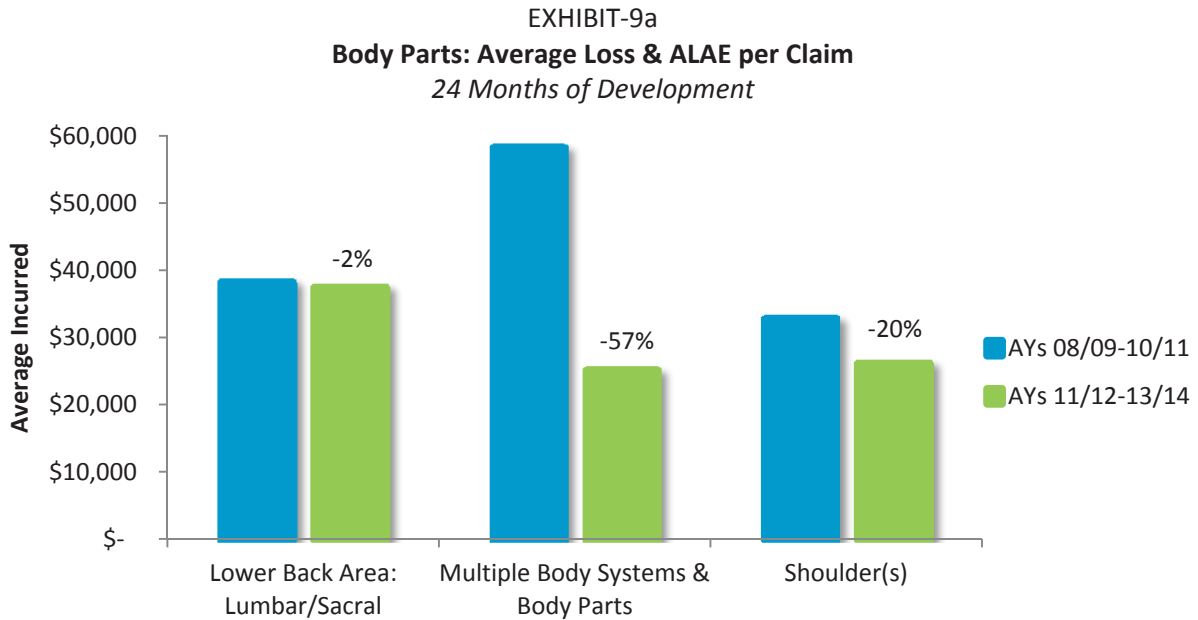
## Cause of Injury

The following chart shows the average incurred and frequency of claims at 24 months of development for the three causes of injury with the highest frequency of claims prior to MEDEX. This comparison includes all indemnity and medical only claims and includes losses and ALAE. For all three cause types, MEDEX claims have a lower average incurred than pre-MEDEX claims.



## Body Part

The following chart shows the average incurred and frequency of claims at 24 months of development for the three body parts injured with the highest frequency of claims prior to MEDEX. This comparison includes all indemnity and medical only claims and includes losses and ALAE. For all three body parts, MEDEX claims have a lower average incurred than pre-MEDEX claims.



Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety, including the graphs, attachments, exhibits and appendices. Our report has been developed for MEDEX's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to MEDEX in preparing this report. Please feel free to call Mark Priven at (916) 244-1161 or Dana Winkler at (503) 419-0455 with any questions you may have concerning this report.

Sincerely,

Bickmore



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Fellow, Casualty Actuarial Society  
Member, American Academy of Actuaries



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