RESEARCH BRIEF

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By Chun Shyong, Barry Lipton, and John Robertson

Drug-Free Workplace Premium Credit Programs

INTRODUCTION

The legalization of marijuana, both recreational and medical, has been an active issue over the last few years, and its implications for Workers Compensation (WC) are still being evaluated.[1] One question naturally arises—what are the implications of the legalization of marijuana for WC Drug-Free Workplace safety programs? This question won't be fully answered until case law evolves further. In the meantime, employers also have continuing concerns about the use of opioids, methamphetamines, cocaine, and other drugs that might impair a worker. A review of the results for risks with Workers Compensation Drug-Free Workplace Program (DFWP) credits seems appropriate. This study includes a limited number of states, and there could be other states (e.g., Ohio) with similar programs not included in this analysis.

BACKGROUND

Some states provide workers compensation premium credits to employers with drug-free workplace programs[2]. The application varies by statute. Generally, to be eligible for this credit, employers may need to implement DFWPs with notice, education, employment-related drug and alcohol testing, or similar procedural requirements. A wide range of drugs might be tested for and include drugs that might impair the employee's ability to perform their job or make them more subject to injury to themselves or fellow workers.

A common expectation may be that workplaces with drug-free workplace programs will generally have fewer injuries or accidents than otherwise comparable workplaces that do not have such programs. In particular, one might expect that claim frequency for employers with DFWPs would generally be lower than for otherwise comparable employers without a DFWP.

This study compares the lost-time claim frequency for WC policies with and without DFWP premium credits. The question being reviewed is whether WC policies receiving DFWP credits, in the reviewed states, do in fact have lower frequency than policies without DFWP credits. **Note:** Risks that do not have DFWP premium credits may or may not be drug-free workplaces.

[1] Laura Kersey, Focus on Marijuana Legalization: Five Things You Need to Know, **ncci.com**, April 26, 2018

[2] For more background, please refer to applicable DFWP statutes and rules, example state References [1–11] are included prior to the Appendix.

KEY FINDINGS

- In the NCCI states reviewed, WC policies with DFWP credits did not have lower claim frequency than comparable policies without DFWP credits
- There is no clear pattern at the class code level for the relative frequency of claims for policies with and without drug-free credits

STUDY DATA

Unit Statistical Plan data is used in this study for:

- The 11 states[3] for which NCCI provides ratemaking services and DFWP statistical codes are specified in NCCI's ***Statistical Plan Manual***—2008 Edition:
  - 9841 Drug-Free Workplace—Subject to Experience Rating, for AL, AR, FL, MS, SC, TN, and VA
  - 9846 Drug-Free Workplace—Not Subject to Experience Rating, for AZ, GA, ID, and KY
- Policy Years 2009 to 2016
- Lost-time claims evaluated at first report

Amounts of credit allowed vary by state. As such, for WC policies having DFWP credits (DFWP policies), we include only the policies where the DFWP premium credit is within a reasonable range relative to state rules:

- AL, AR, FL, MS, SC, and TN—Statistical Code 9841 premium credits are between 4.5% and 5.5%
- AZ, ID, and KY—Statistical Code 9846 premium credits are between 3% and 7%
- GA—Statistical Code 9846 premium credits are between 5% and 15%
- VA—Statistical Codes 9841 and 9846 premium credits are between 4.5% and 5.5%

METHODOLOGY

We use lost-time claim frequency relative to premium to compare the policies having DFWP credits with policies not having DFWP credits. Lost-time claims are used because they represent about 90% of total incurred losses. We use premium as the base for frequency because this measure is less impacted by shifts in class mix from one year to the next than is frequency to payroll.[4] Specifically, frequency is reported, undeveloped lost-time claims at first report per million dollars of premium, on-leveled to NCCI-approved pure loss cost levels by state. The premium is adjusted for changes in average weekly wages by state. Experience rating modification factors (mods) are applied to policy premiums using the actual policy mods at the state and class code level. We do not reduce policy premiums by any applicable DFWP credits.

We only use data for which premium at the state, policy year, and class code levels for DFWP policies and for non-DFWP policies each exceed $1,000.

We control for mix by class using weights based on total premium by class over the eight years reviewed.

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[3] Note that Maryland's DFWP law became effective October 1, 2016 and is not included in the study due to the timeframe of the data NCCI analyzed (2009 - 2016).

[4] Jim Davis, NCCI Explains Its Top 3 Frequency Measures, Posted on **ncci.com:** October 15, 2018, www.ncci.com/Articles/Pages/II_Insights-Top3FreqMeasures.aspx.

DFWP PREMIUM VOLUME

The number of policies having DFWP credits varies considerably from state to state. The average number of DFWP policies per policy year (PY) ranges from close to 15,000 policies in Florida to less than 100 policies in Kentucky. There are five states for which the average number of DFWP policies per year is less than 1,000 (ID, MS, AL, AR, and KY)—these five states are not included in the total market claim frequency analysis due to the low policy volume relative to the other states.

Exhibit 1 displays the DFWP share of total policies by state; states are ordered by average number of DFWP policies per year.

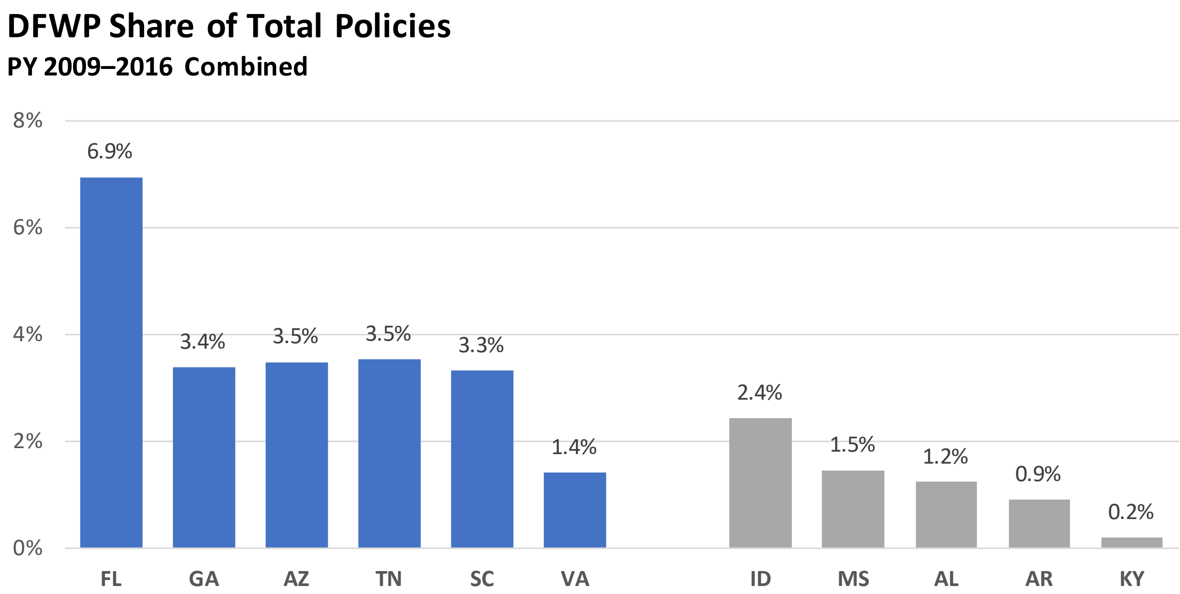

Exhibit 1

Exhibit 2 shows the share of DFWP premium to total premium. Florida and Tennessee have the highest DFWP share for both number of policies and total premium.

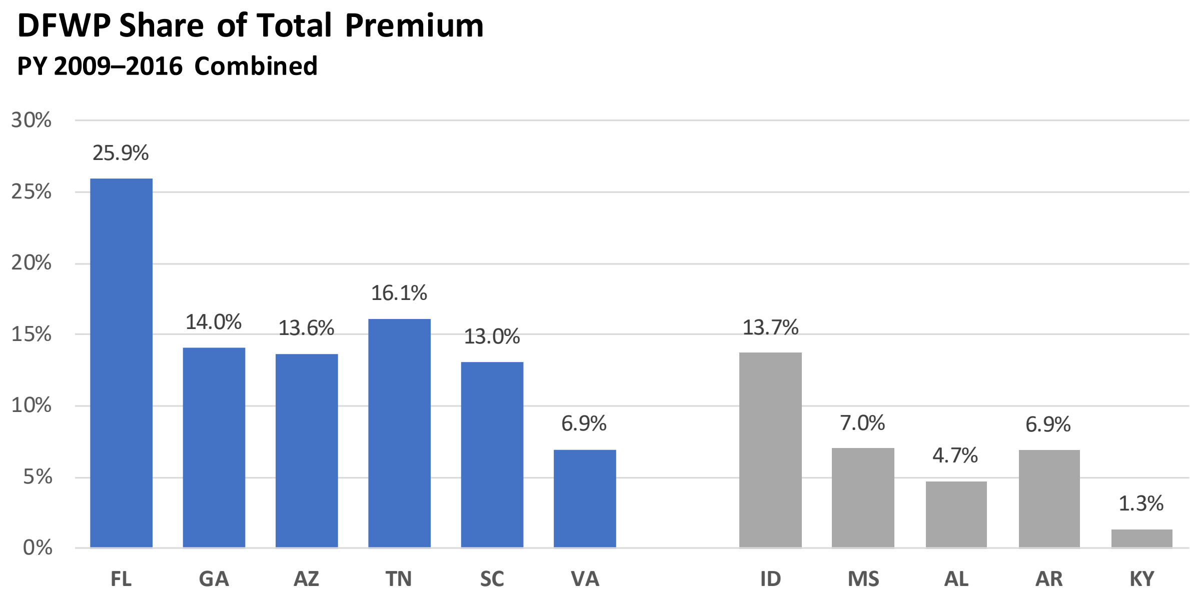

Exhibit 2

The average DFWP premium credit, across policies with the credit, is about 5% in all states except Georgia, where the average credit is around 7%, as shown in Exhibit 3. The premium credit shown here is derived by applying the calculated credit percentage (reported credit to written premium) to the wage-adjusted and loss cost on-level premium (experience rating not applied).

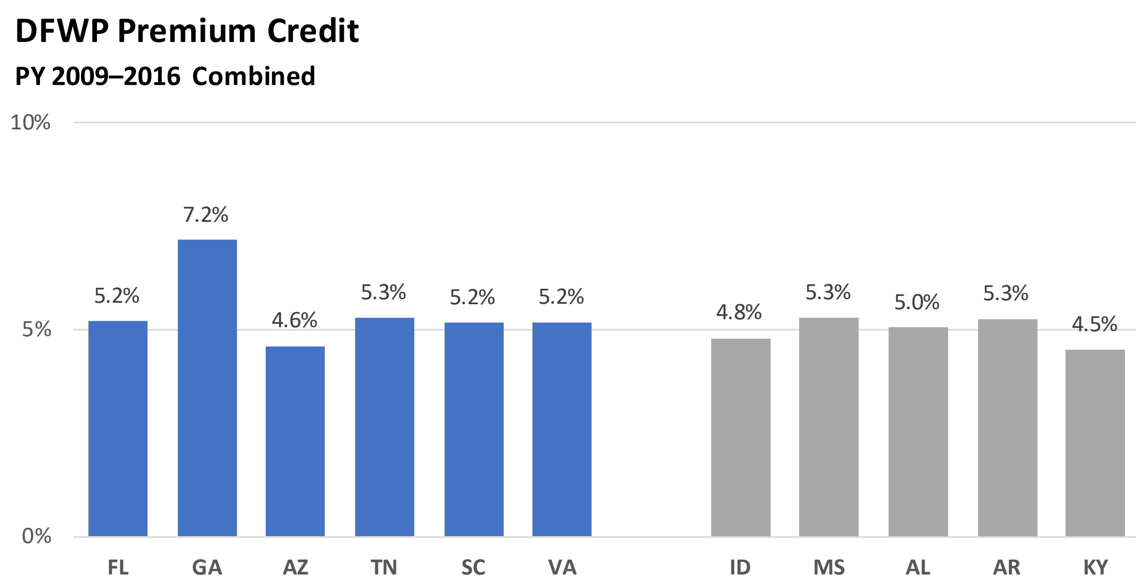

Exhibit 3

LOST-TIME CLAIM FREQUENCY COMPARISON

For the following exhibits, we use the six states for which the state's average number of DFWP policies per year is more than 1,000 policies (FL, GA, AZ, TN, SC, and VA).

Overall, for all years combined for each state, Exhibit 4 shows that the DFWP claim frequencies are at least as high as non-DFWP claim frequencies in all six states—this is contrary to any expectation of lower claim frequencies for DFWP policies.

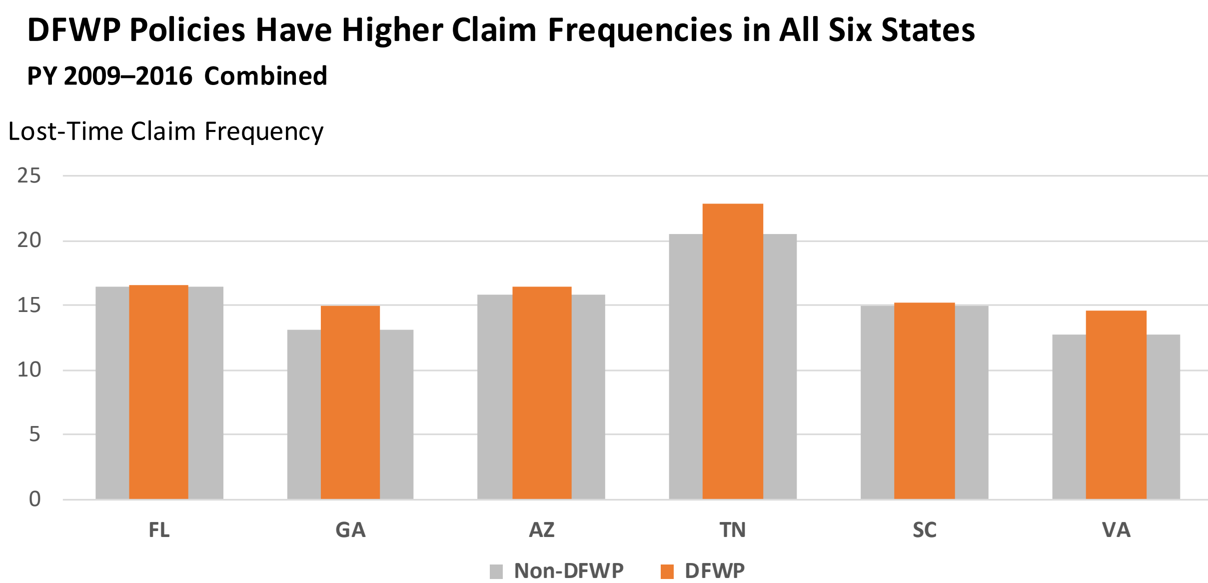

Exhibit 4

From year to year, DFWP claim frequencies in any of the states reviewed are not persistently higher than non-DFWP claim frequencies. There are lower DFWP claim frequencies in one or more years in each state. For example, Florida's DFWP claim frequencies are lower than non-DFWP claim frequencies in Policy Years 2013, 2014, and 2016, as indicated in Exhibit 5. For five of the eight years shown, DFWP claim frequency is higher than non-DFWP claim frequency.

DFWP Policies Have Higher Claim Frequencies in Some Years—Florida

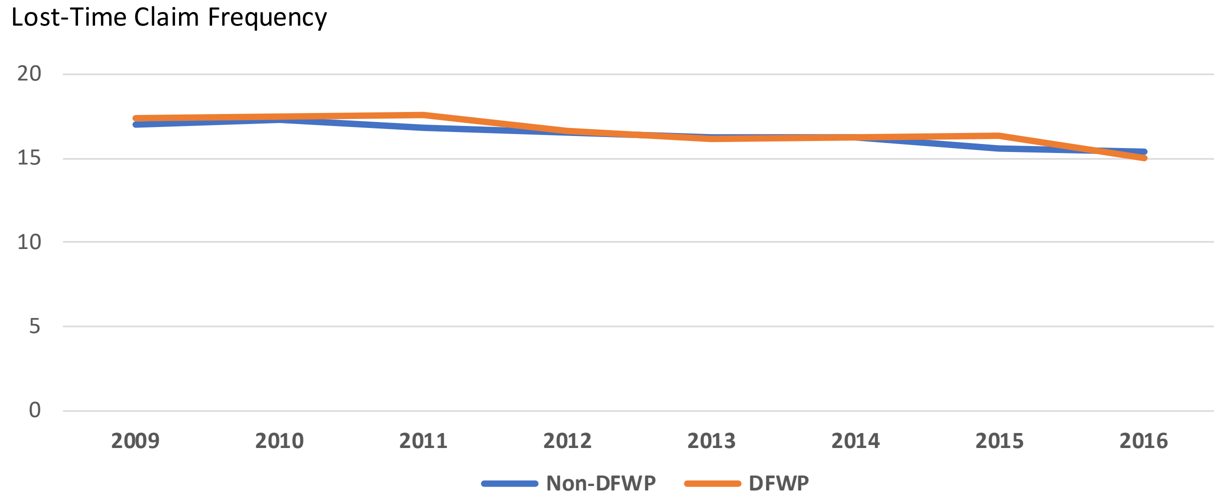

Exhibit 5

Exhibit 6 looks at the number of years where the claim frequencies are higher for DFWP policies compared to non-DFWP policies by state. The number of years with higher DFWP claim frequencies range from four to eight. Georgia, Tennessee, and Virginia have higher DFWP claim frequencies in all eight years.

Number of Years Where DFWP Policies Have Higher Claim Frequencies

PY 2009–2016

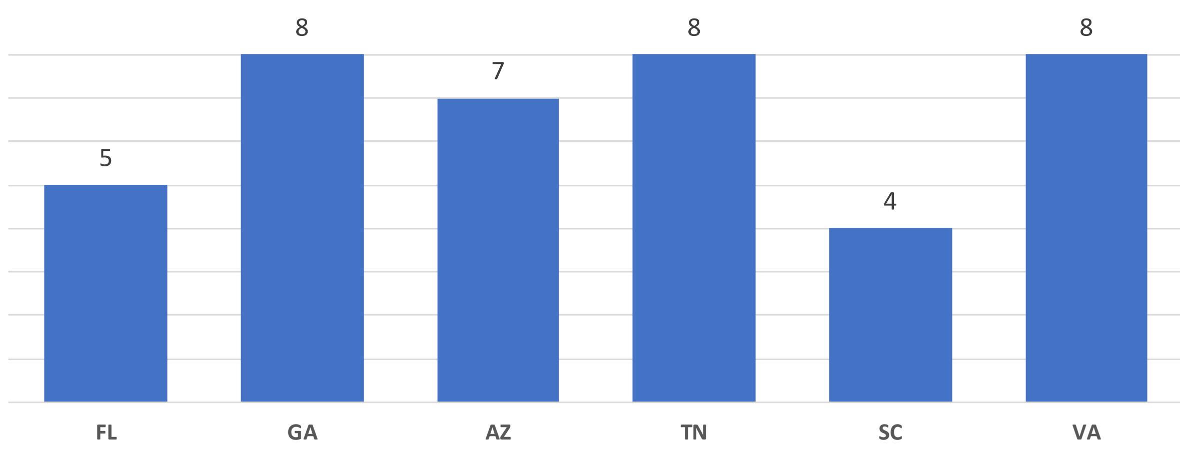

Exhibit 6

We also review the claim frequencies by market type for each state. For this analysis, we require that there are premiums in both DFWP and non-DFWP policies for each class per state, year, and market type. The DFWP and non-DFWP claim frequencies for the voluntary market are almost identical to the DFWP and non-DFWP claim frequencies for the total market (voluntary and assigned risk market combined), as shown in Exhibit 4. Exhibit 7 displays the DFWP and non-DFWP claim frequencies for the assigned risk market—there are three states with higher DFWP claim frequencies (GA, TN, and VA) and two states with lower DFWP claim frequencies (FL and SC). Due to low volume, these results might not be indicative of future relationships. Arizona is not shown due to the low volume of assigned risk policies.

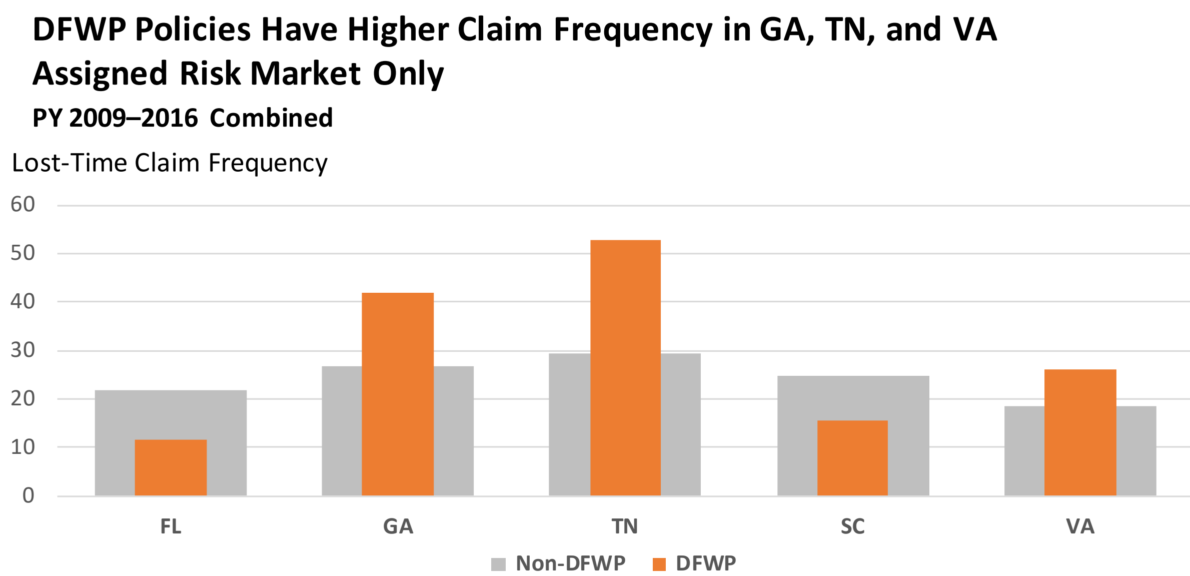

Exhibit 7

Exhibit 8 shows that the assigned risk market has fewer years with higher DFWP claim frequency than does the voluntary market. But there are only a small number of DFWP policies in the assigned risk market, ranging from 184 policies (SC) to 582 policies (TN). Arizona is not shown due to the low volume of assigned risk policies.

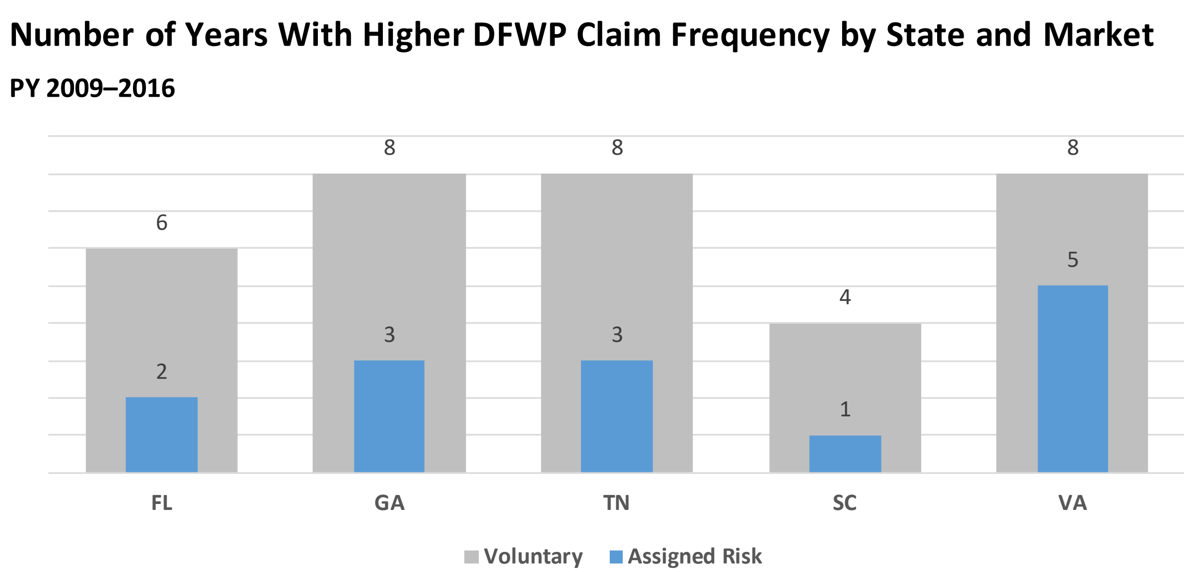

Exhibit 8

LOST-TIME CLAIM FREQUENCY FOR THE TOP 10 CLASS CODES BY STATE

The previous analyses showed that WC policies receiving DFWP credits generally did not have lower claim frequencies, by state and year, than non-DFWP policies. But there is no clear pattern at the class level for the relative frequency of claims for WC policies with and without drug-free credits—many classes have seen lower claim frequencies in a DFWP than in a non-DFWP. For example, Exhibit 9 displays claim frequencies for DFWP and non-DFWP policies for Florida's largest 10 classes ranked by total lost-time claims. Of these 10 classes, 4 have a higher claim frequency in DFWP than in non-DFWP.

Lost-Time Claim Frequency for the Top 10 Classes—Florida

PY 2009–2016 Combined

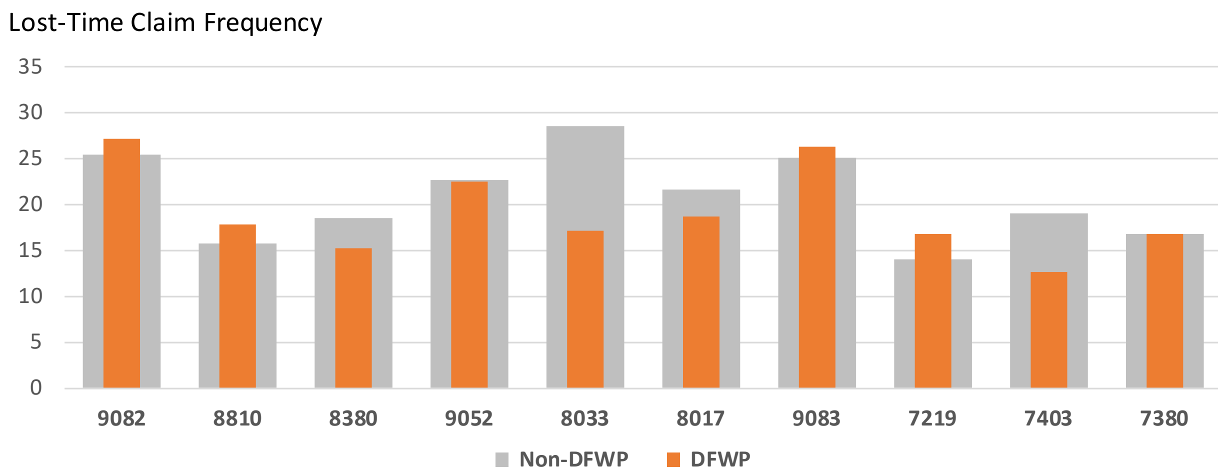

Exhibit 9

Class Code	Lost-Time Claims	Share of Total Claims	Class Description
* 9082	17,552	5.2%	Restaurant NOC
* 8810	12,456	3.7%	Clerical Office Employees NOC
8380	9,806	2.9%	Automobile Service or Repair Center and Drivers
9052	9,800	2.9%	Hotel—All Other Employees and Salespersons, Drivers
8033	9,399	2.8%	Store—Meat, Grocery and Provision—Combined—Retail—NOC
8017	9,196	2.7%	Store—Retail NOC
* 9083	8,830	2.6%	Restaurant—Fast Food
* 7219	8,401	2.5%	Trucking—NOC—All Employees and Drivers
7403	7,465	2.2%	Aviation—All Other Employees and Drivers
7380	7,351	2.2%	Drivers, Chauffeurs, Messengers and Their Helpers NOC—Commercial
Top 10 Classes	100,256	29.9%	
All Classes	335,438	100.0%	

* DFWP claim frequency is higher

The DFWP claim frequency for all years combined is higher than non-DFWP claim frequency for Florida's largest class, Class Code 9082—Restaurant NOC (ranked by total lost-time claims). But, for two of the eight years, claim frequency in DFWP for this class is lower than in non-DFWP, as shown in Exhibit 10.

Lost-Time Claim Frequency—Florida

Class Code 9082—Restaurant NOC

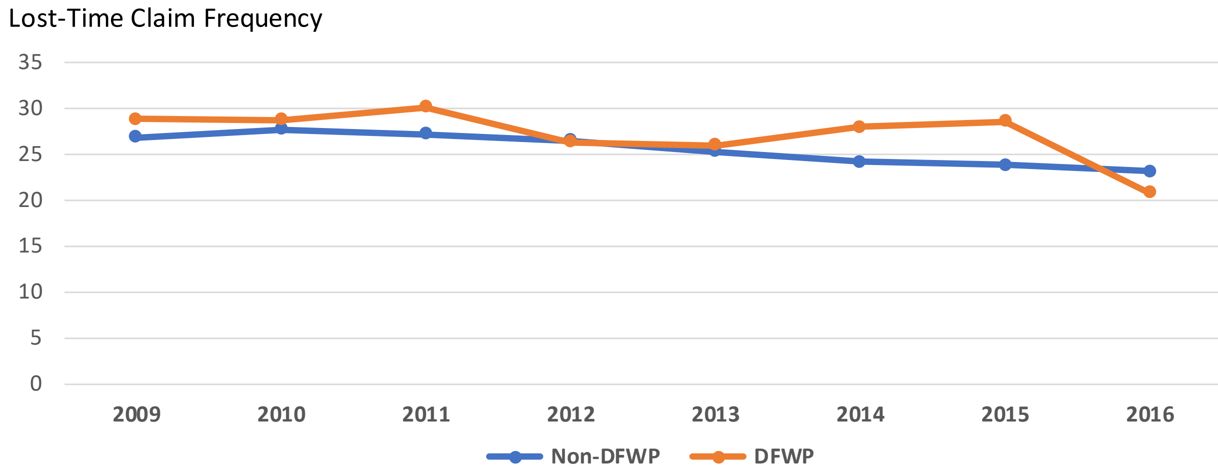

Exhibit 10

Exhibit 11 displays the number of years with higher DFWP claim frequency by state for Class Code 9082—Restaurant NOC. This class has the highest number of lost-time claims across all classes in FL, GA, SC, and VA; the second highest number of lost-time claims in AZ; and the eighth highest number of lost-time claims in TN.

Number of Years Where DFWP Policies Have Higher Claim Frequencies

Class Code 9082—Restaurant NOC

PY 2009–2016

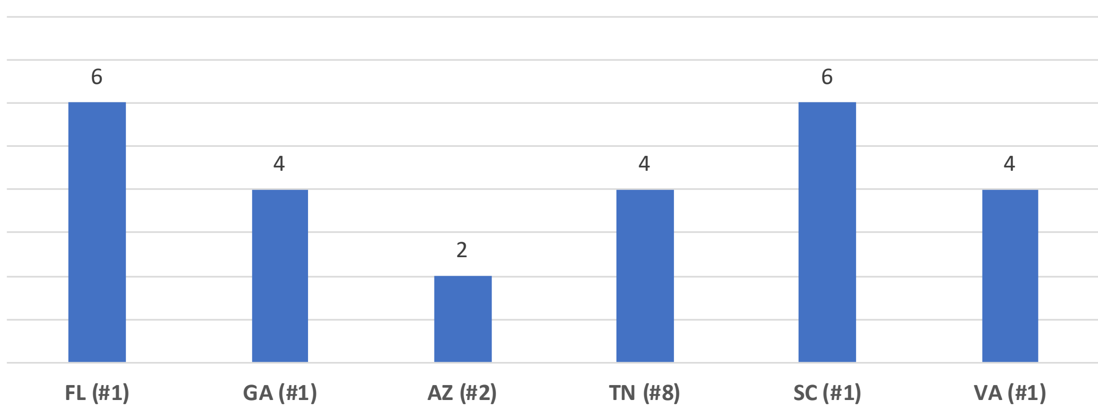

Exhibit 11

In the states reviewed, employers with the DFWP credit did not have lower frequency based on the data we reviewed. What might be causing this result?

Let's look at the possible motivations for getting a DFWP credit and see if that sheds some light on the issue.

1) The policyholder is safety-minded and is doing it to promote safety in the workplace. This is the scenario that leads to expectations of lower frequency—an employer focused on safety instituting loss prevention.
2) The policyholder is price-sensitive and is aware that they could get a premium credit for having a program. In this case, once the credit is received, the immediate goal is achieved.
3) The policyholder is having poor loss experience, and the insurer is the one requesting that the employer qualify for a DFWP credit. If this happens often, the group with the DFWP credits is a biased sample of insureds, with worse experience than average before the consideration of the DFWP program. A program could still be effective, but not so effective as to overcome the original frequency disadvantage.
4) Similarly, insureds with good loss experience may already be as drug-free as those with the credit. The original assumption is that those with a program have workers on the job that are less impaired than those without a program, but that may not be the case.

Given this wide range of possible underlying motivations, it is hard to generalize about the efficacy of these programs. And there are differences in the administration of DFWP statutes across states. For example, drug testing prior to employment may not be as effective as a DFWP that uses ongoing regular/intermittent testing. A likely explanation could be somewhere in the middle—effective in some cases, not effective in others.

For the more recent years, developments regarding the legalization of marijuana at the state level may be viewed as inconsistent with employer DFWPs, where medical or recreational marijuana is legal in a state, but marijuana use by employees remains impermissible under an employer's DFWP. It is possible that some employers may have relaxed testing requirements or enforcement, especially when, for example, they may have employees across multiple states with differing laws on permissible marijuana use, or where an employer may not be permitted to terminate or take adverse action against an employee who is an authorized medical marijuana user.

CONCLUSION

Overall, in the states reviewed, claim frequencies by state and year for WC policies receiving DFWP credits are not lower than for non-DFWP policies. There are classes that have lower DFWP claim frequencies in some states, but there is no apparent consistent pattern from year to year.

REFERENCES

[1] Alabama Drug-Free Workplace Premium Credit Program; Article 13 § 25-5-330–§ 25-5-340

[2] Arizona Alcohol- and Drug-Free Workplace Premium Credit; Arizona Revised Statutes § 23-961

[3] Arkansas Alcohol- and Drug-Free Workplace Premium Credit; Arkansas Code Title 11. § 11-14-101–§ 11-14-112

[4] Florida Drug-Free Workplace Premium Credit Program; Florida Statutes 440.101, 440.102

[5] Georgia Drug-Free Workplace Premium Credit Program; § 33-9-40.2; Article 11 of Chapter 9 Title 34 § 34-9-410–§ 34-9-421

[6] Idaho Employer Alcohol- and Drug-Free Workplace Premium Credit; Chapter 17 Sections 72-1701–72-1716

[7] Kentucky Drug-Free Workplace Premium Credit Program; Section 803 KAR 25:280

[8] Mississippi Drug-Free Workplace Credit Program; §§ 71-3-201–71-3-225

[9] South Carolina Drug- and Alcohol-Free Workplace Premium Credit Program; SC Code Sec. 38-73-500

[10] Tennessee Drug-Free Workplace Premium Credit Program; Title 50_Chapter 9_§ 50-9-101–§ 50-9-114

[11] Virginia Drug-Free Workplace Premium Credit Program; Title 65.2 Chapter 8 § 65.2-813.2

APPENDIX

As a reasonableness check, we compared the claim frequencies of this DFWP study to the claim frequencies from the 2019 NCCI study, *Frequency and Severity Results by State*.[5] Although both studies use Unit Statistical data for lost-time claim frequency relative to premium, there are differences in the methods and data used for analyses. For example, this DFWP study is based on policy year, while the *Frequency and Severity Results by State* study is based on calendar-accident year.

Despite the differences in the underlying methods and data, the claim frequencies are similar at the state level from 2013 to 2016. The *Frequency and Severity Results by State* study generally has higher frequencies except that for 2016, Florida and Virginia have slightly lower claim frequencies (see Exhibit 12).

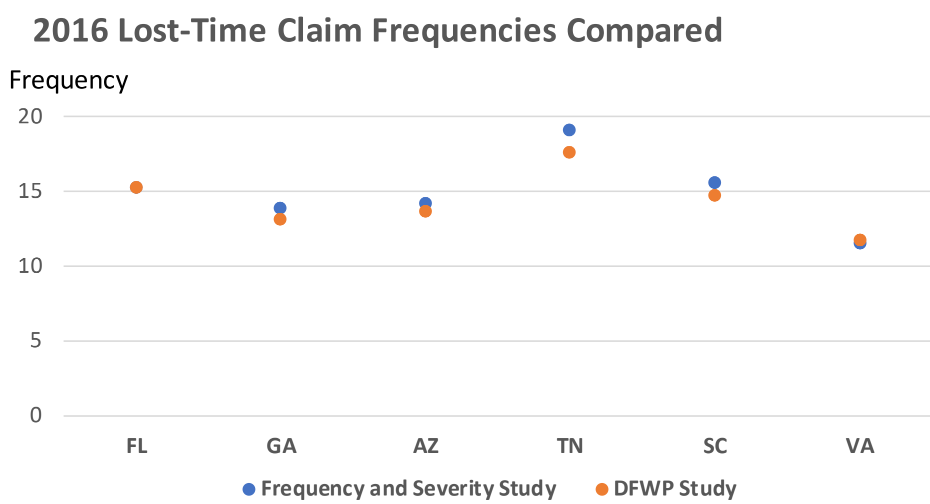

Exhibit 12

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[5] Jim Davis, Frequency and Severity Results by State, Based on Data Valued as of December 31, 2017, Posted on **ncci.com**: March 12, 2019, **ncci.com**/Articles/Pages/II_Frequency-Severity.aspx.