

EFFECTS OF THE 1983 WORKERS' COMPENSATION REFORMS:

**BUSINESS-SIZE OPEN CLAIM STUDY
PERMANENT PARTIAL DISABILITY OPEN CLAIM STUDY
CLOSED CLAIM STUDY**

**PREPARED BY:
RESEARCH AND EDUCATION DIVISION
MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY
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INTRODUCTION

The 1983 changes in the Minnesota Workers' Compensation Law have led to a great deal of interest in monitoring the system to determine how it is working. The Minnesota Department of Labor and Industry has completed three studies that provide a very encouraging picture of the system's performance. These "early returns" suggest the new law is accomplishing its goals of lower costs and rates of litigation and a faster return to work for injured workers.

One study focusing on the effects of the new law on businesses of different sizes was mandated by the Legislature. The Department was asked to study how small businesses' workers' compensation insurance premiums were affected by the 1983 law amendments. Because 1984 loss experience and premium information will not be available until 1986 through normal insurance industry data-gathering organizations, the law's effect on workers' compensation premiums cannot be evaluated at this time. Instead, factors that affect premium costs, such as the litigation rate for workers' compensation claims and the duration of lost work time due to work-related injuries, were examined. If these factors have improved under the new law, it is reasonable to expect they will have a beneficial impact on workers' compensation premiums.

Each of the three studies described in this report seeks to examine certain aspects of the workers' compensation system and to compensate for the limitations of the other studies. The three studies are the Business-Size Open Claim Study that was legislatively mandated, a study of all Permanent Partial Disability claims present in the open claim data base, and a Closed Claim Study.

Based on data obtained from insurers' reports to Labor and Industry collected in the Department's Sperry Mapper Computer System, the results of all three studies show substantial improvement in many of the factors affecting premium costs. Each study reveals a decline in litigation, in the duration of lost work time, and as a result, in the cost of benefits for Temporary Total and Permanent Partial Disability. Although it is still too early to make conclusive determinations about how well the workers' compensation system is working, the same positive trends were present in all three studies and suggest significant positive effects of the 1983 law in reducing costs for Minnesota business.

SUMMARY OF CONCLUSIONS

While it may be too early to draw definitive conclusions about the performance of the 1983 Minnesota Workers' Compensation Law, it is apparent from the results of the three studies presented in this report that some of the most important factors ultimately affecting the performance and cost of a workers' compensation system have substantially improved. These improvements are even more striking because each of the three studies approached the collection and analysis of data differently but came up with similar results, suggesting that the positive changes and trends identified are valid and significant.

All three studies show a consistent 28- to 32-percent decrease in the average duration of disability (lost work time) due to a work-related injury. As a result of this, Temporary Total Disability (TTD) benefits have decreased by almost the same amount in all three studies. In the past, an unusually long average duration of disability was a major reason for high costs in Minnesota.

The reduction in the average duration of disability for TTD cases, especially the reduction in the number of cases that last more than six or twelve months without a return to work also means that the size of the pool of claims that could lead to long-term disability has gone down. This is a very promising sign that there may be a significant reduction as time passes in the frequency of long-term disability cases, a key contributor to unusually high costs in Minnesota in the past. These cases are very expensive to the system as a whole and especially to the Special Fund and the Workers' Compensation Reinsurance Association.

The frequency and size of Permanent Partial Disability awards appear to have decreased as well. While it might be premature to accept this conclusion from the study numbers alone, the high percentage of claims resulting in return to work suggests that the reductions in the average Permanent Partial Disability award as well as the number of claims with Permanent Partial Disability will hold since such awards are greater for claimants unable to return to work. In fact, it is likely that these numbers will continue to decrease as the significant number of old-law claims still open work their way out of the system.

At the same time, the number of claims with Temporary Partial Disability benefits should increase somewhat in response to a greater percentage of workers being returned to light-duty jobs.

Another encouraging trend found consistently in the three studies is a substantial drop in litigation. Litigation is a major cost factor in all workers' compensation systems. A high litigation rate in a workers' compensation system is usually an indication of high costs.

The litigation rate in Minnesota before the passage of the new law was greater than ten percent. The Closed Claim Study showed the litigation rate for claims closing in October 1984 to be 6.6 percent.

The percent of new-law cases in this litigation figure is very low. Some of the reduction is certainly the result of administrative changes that accompanied the new law, including alternative dispute resolution methods, and of better claims management by employers and insurers. But in the future, as new-law cases become the majority in the system, the objective schedules for rating Permanent Partial Disabilities and the incentives found in the new two-tier benefit structure should contribute to an even greater reduction in litigation. It is not unreasonable to hope, based on the results so far, that as old-law litigated cases work themselves through the system and are resolved, they will not be replaced by new-law litigation.

The reductions in duration of disability and litigation, along with the increase in return to work revealed by these studies are strong indications that the reformed workers' compensation system is doing what the Minnesota Legislature intended in 1983. The new system is realizing savings for employers and better service for injured workers. With continued attention to the health of the system, maintaining and expanding this success ought to be possible.

BUSINESS-SIZE OPEN CLAIM STUDY

This study evolved out of a legislative mandate requiring the Department of Labor and Industry to study the effects of the 1983 Minnesota Workers' Compensation Law on the workers' compensation premiums of small businesses. Legislators were concerned about how small businesses would fare under the new law. Critics of the bill had argued that small businesses would have a much more difficult task returning injured workers to modified and light-duty jobs than would larger businesses and, therefore, would not be able to realize the savings the two-tier system could provide.

The two-tier system for compensating Permanent Partial Disability enables employers to save money on Permanent Partial Disability awards if they help injured workers to return promptly to suitable, gainful employment.

The critics also feared that small businesses would not see as great a decline in benefit payments as might larger ones because smaller businesses often pay very low wages. Under the old system, Permanent Partial Disability awards were all based, in part, on the employee's wage rate at the time of injury. The Permanent Partial Disability award under the two-tier system where the employee receives a suitable job offer is based on a flat dollar amount for all employees; so savings for high-paying employers will be greater than for low-paying employers. To the extent that small businesses tend to pay low wages, they may not enjoy savings as great as larger employers.

Because information on 1984 workers' compensation experience will not be available through the Workers' Compensation Insurers Association of Minnesota until 1986, the effects of the new law on premium costs could not be determined. Instead, the factors in the workers' compensation system that affect premium costs were analyzed. If those factors improve for small businesses under the new law, it is likely those improvements eventually will be reflected in lower premiums for those businesses.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
I. <u>Origin of Claims:</u>	1,000		1,000	
A. Small business (0-50)	280	28	310	31
B. Medium business (51-249)	240	24	230	23
C. Large business (250+)	480	48	460	46

The claims were first sorted according to the size of the business in which they originated. There is no standard definition for business size, so for the purposes of this study, a small business is defined as one with 0 to 50 employees, a medium-size business as one with 51 to 249 employees, and a large business as one having 250 or more

employees. Size definitions were chosen to assure an adequate sample of injuries in each size of business, especially small businesses, so reliable statistical conclusions could be drawn. The sizes of the businesses in the sample were identified through a Dunn & Bradstreet computer file and other sources. Business size was determined in approximately 88 percent of the claims from both March 1983 and March 1984. Based on the ratio of small, medium and large businesses in each month's data base, a random sample of 1,000 claims from each month was then selected. For example, 28 percent of the March 1983 claims originated in small businesses; therefore, the March 1983 sample includes 280 claims for small businesses.

All information describing claims in these samples was obtained from data stored in the Department's Sperry Mapper Computer System, except in cases in which the information seemed incomplete. In those cases, the paper files were pulled and researched by hand. Because of reporting inconsistencies by insurance companies, a large number of the claims in the samples were individually researched.

Although an Open Claim Study is the most direct way to compare undiluted old- and new-law data, the data in this study, especially the 1984 data, is still immature. Nevertheless, the trends indicated by the study are significant and encouraging, particularly to the extent that they are supported by the Closed Claim Study.

<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>

II. Status of Claims:

A. Claims with no lost time

1. Small business	63	22.5	78	25.2
2. Medium business	51	21.25	49	21.3
3. Large business	190	39.6	141	30.6

This category includes medical-only claims, those claims in which a First Report of Injury was filed but less than three days of work were lost, and a few Permanent Partial Disability-only claims. Reports of these cases are only required when they include Permanent Partial Disability. The large number of reported no lost-time cases without Permanent Partial Disability is a result of efforts made by both the Department and insurers to ensure all injuries are reported promptly, even when it is likely they will not result in lost time. Therefore, the size of these numbers depends more on reporting behavior than it does on actual activity in the system.

B. Claims with return to work (RTW)

1. Small business	191	68.2	214	69
2. Medium business	176	73.3	165	71.7
3. Large business	277	57.7	295	64.1

Claims in this category are lost-time claims that have successfully closed with the injured worker returning to work. The number of March 1984 claims with RTW from small and large businesses is larger than the number of those in March 1983. The number of 1984 claims with RTW originating in medium-size businesses is slightly below the 1983 total.

The fact that more 1984 claims have resulted in return to work in a much shorter time than have 1983 claims (which have had an additional 12 months to mature) suggests that the new law is succeeding in encouraging rapid return to work.

<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>

C. Claims with no lost time or return to work

1. Small business	254	90.7	292	94.2
2. Medium business	227	94.5	214	93
3. Large business	467	97.3	436	94.7

When the total number of claims with no lost time is added to the total number of claims with return to work for each business-size category, and that total is compared to the total number of claims in the sample, it becomes apparent that an overwhelming majority of claims in all three size categories are closed by the injured worker returning to work. Although all three size categories have higher than a 90 percent RTW rate in the March 1984 data, small business is the only category to have experienced an increase in this percentage. This suggests that even with a limited pool from which to offer injured workers jobs, small business can be very successful at returning injured workers to work.

D. Claims still open

1. Small business	14	5	11	3.5
2. Medium business	10	4.2	2	.8
3. Large business	7	1.5	5	1.6

Not every open case is included in this category. For example, cases in which an employee has returned to work but is awaiting a Permanent Partial Disability rating are not included. In this study, open cases are defined as cases in which the employee is collecting benefits and has not returned to work, or in which the employee has returned to work but litigation or a rehabilitation plan is still pending.

This section highlights some of the most promising data to be found in the Business-Size Study. There are only 18 claims remaining open from March 1984, while there are 31 claims still open from March 1983. One would expect to find there were fewer open cases left from March 1983 because those claims have had a full extra year to come to a close.

However, just the opposite was found, which supports the hypothesis that the new law is fulfilling its objectives of improving administration of claims and returning injured workers to work in a timely and efficient manner.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>

E. Closed claims with no return to work

1. Small business	11	4	5	1.6
2. Medium business	3	1.2	13	5.6
3. Large business	5	1	18	3.9

A very small proportion of claims from either sample was closed without a return to work. In the vast majority of cases, claimants return to work after their injury. This is exactly what should happen in a good workers' compensation system. There are slightly more cases that have closed with no return to work in the 1984 sample than in the 1983 sample. They are a tiny minority in either sample; however, especially considering that approximately 85 percent of workers' compensation claimants who have more than three days of lost-time suffer no permanent injury and could have their claims closed without a job offer. The slight increase may be due to economic dislocations in some areas of Minnesota, which severely limit job availability.

F. Open with return to work

1. Small business	6	2.1	4	1.3
2. Medium business	4	1.6	0	0
3. Large business	4	.8	0	0

The claims in this category are those which have resulted in return to work for the claimant but which remain open for some reason, such as pending litigation or a rehabilitation plan still in process.

III. Truncated Sample Data:

A. Avg. duration in days		39.7	27
B. Avg. TTD award	\$1,246.63	\$844.68	

These two averages were obtained from a truncated version of the data base in an attempt to compensate for the immaturity of the data in the samples. From each sample, the first 96 percent of the claims to close were separated from the other data and this truncated sample was used as the source for these figures. Because less than four percent of cases in either sample had not yet been closed, this created comparable samples of closed claims from which to draw meaningful comparisons. These show there has been a substantial drop in the amount of temporary disability being compensated. In the March 1984 claims from all business sizes, there was a 32-percent decrease in the duration of lost time and in the average Temporary Total Disability award paid.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
IV. <u>TTD Data:</u>				
A. <u>Claims with no TTD</u>	334	33	317	32
1. Small business	74	26	89	29
2. Medium business	60	25	62	27
3. Large business	200	42	166	36
B. <u>Claims with TTD</u>	666	67	683	68
1. Small business	206	74	221	71
2. Medium business	180	75	168	73
3. Large business	280	58	294	64

These two classifications simply represent an effort to further describe the data in the study and to establish standards for future comparisons. Claims without Temporary Total Disability (TTD) benefits paid are usually not required to be reported to the Department. Their frequency in the sample is more a reflection of reporting behavior than activity. This number slightly exceeds the number of no-lost-time cases reported in the sample because it included cases in which Temporary Partial Disability benefits only are reported.

C. Lost time in days

1. <u>Average for</u>		
<u>all claims</u>	50	34
a. Small business	67	41
b. Medium business	51	29
c. Large business	37	32

The average lost time in days was calculated by dividing the total Temporary Total Disability paid by the weekly compensation rate for each case divided by seven (for a seven-day week). It was determined for all closed cases in both samples, as well as the truncated sample.

The average duration of lost work time due to a work-related injury has dropped to 34 days for March 1984 injuries from 50 days for March 1983 injuries. This same 32 percent decrease in the amount of disability in the system was seen in the truncated sample data.

Because a greater percentage of the 1984 cases are closed and included in this average, it is likely that fewer of the more serious injuries are included in the 1983 average. As time passes and these more serious cases close, both averages will undoubtedly rise, but it is likely the 1983 average will rise more, since there are more such cases still open from the 1983 sample.

All three business-size categories experienced a reduction in lost work time. However, small- and medium-size businesses experienced a much larger reduction than did large-size businesses. Although large businesses enjoy a faster return-to-work time than small businesses in both samples, their results were already much better even before the law reform. Since the law change, small businesses have improved more, if from a poorer base. Therefore, the fear that small businesses would not benefit from the new law because of difficulties they would have returning their injured workers to work seems unfounded. If anything, small businesses may enjoy greater percentage savings than larger businesses.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
V. <u>Denied Claims:</u>	76	8	78	8
A. Small business	21	8	25	8
B. Medium business	12	5	15	7
C. Large business	43	9	38	8

No distinction was made between claims properly and improperly denied. These statistics show no significant difference between the two samples. Other Department statistics suggest that the actual number of denied claims has decreased by about 20 percent from 1983 to 1984.

VI. <u>Litigated Claims</u>	33	3	13	1
A. Small business	12	4	9	3
B. Medium business	12	5	1	0
C. Large business	9	2	3	1
D. Filed within 90 days from first day of lost time	0	0	1	8
E. Filed within 6 months from first day of lost time	4	12	4	31
F. Filed within 1 year from first day of lost time	14	42	9	69
G. Litigated claims with primary denial in file	4	12	5	38

	<u>D.O.I. - March '83</u>		<u>D.O.I. - March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
H. Litigated claims Petition of Obj. to Disc.	7	21	3	23
I. Claims with petition date equal or preceding 1st report date	3	9	0	0

A high litigation rate is one of the leading indicators of high costs in a workers' compensation system. For the purposes of this study, a litigated case is defined as a claim that has had any type of petition filed on it.

The data shows a substantial drop in litigation for 1984 claims; however, it is too early to make any conclusive determinations about the 1984 data, since it has not had enough time to mature. The Closed Claim Study, which accompanies this study, includes much more dependable and significant litigation data.

VII. PPD Data:

A. Permanent Partial Disability award	118	12	48	5
1. Small business	50	18	20	6
2. Medium business	24	10	6	3
3. Large business	44	9	22	5
B. Lost time claims with Permanent Partial Disability	108	16	42	6
1. Small business	46	22	18	8
2. Medium business	23	13	5	3
3. Large business	39	14	19	6

The number of claims with Permanent Partial Disability has decreased substantially for the 1984 data in this sample. Although an eventual reduction in the number and severity of Permanent Partial Disability claims under the new law is anticipated as a result of the new, objective impairment schedule, the reduction seen here is most likely the result of the immaturity of the data. More detailed information about cases with Permanent Partial Disability awards is included in the other two studies.

Because the number of Permanent Partial Disability awards in this sample was quite low, making generalization difficult, all the Permanent Partial Disability claims originating in March 1983 and March 1984 were analyzed and compared. This analysis is called the Permanent Partial Disability Study and is included in this report.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
VIII. <u>Claims with Temporary</u>				
<u>Partial Disability Paid:</u>	102	10	97	10
A. Small business	32	11	32	10
B. Medium business	19	8	19	8
C. Large business	51	11	46	10

Claims with Temporary Partial Disability benefit payments are difficult to identify because this information is not reliably reported to the Department. Therefore, no definitive conclusions can be drawn from this data.

IX. <u>Return to Work Data</u>				
<u>(Closed, Lost-Time Claims):</u>	638	96	665	97
A. Less than 30 days				
1. Small business	130	63	137	62
2. Medium business	122	68	122	73
3. Large business	195	70	199	68
B. Less than 60 days				
1. Small business	159	77	172	78
2. Medium business	143	79	148	88
3. Large business	237	85	254	86
C. Less than 90 days				
1. Small business	168	82	194	88
2. Medium business	154	86	155	92
3. Large business	255	91	268	91
D. Less than 6 months				
1. Small business	180	87	210	95
2. Medium business	164	91	162	96
3. Large business	263	94	284	97

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
E. Less than 9 months				
1. Small business	182	88	212	96
2. Medium business	168	93	164	98
3. Large business	270	96	289	98
F. Less than 12 months				
1. Small business	186	90	212	96
2. Medium business	172	96	164	98
3. Large business	271	97	289	98
G. More than 12 months				
1. Small business	4	2	0	0
2. Medium business	3	2	0	0
3. Large business	2	1	0	0

This section of the study attempted to determine whether injured workers are returning to work more quickly under the new Workers' Compensation Law than they were under the old law. Closed lost-time cases with a return to work were separated into categories of length of time elapsed between date of injury and return to work. The total length of lost time is determined by taking the total amount of the Temporary Total Disability benefits paid and dividing that by the compensation rate divided by seven (for a seven-day week).

Very little change was found between the 1983 and 1984 samples in the number of claimants returning to work within 30 days from the date of injury. These claims involve minor injuries, such as an ankle sprain or a hurt finger, resulting in only a small loss of work time. The benefit structure has very little effect on how fast these workers recover and return to work.

A striking difference is apparent between the two years in the number of claims that have resulted in return to work as the time from the date of injury increases. More claimants in the 1984 sample had returned to work within six months from the date of injury than had in 12 months from the date of injury in the 1983 sample. This suggests that return to work is happening much faster for cases under the new laws than it did for those cases under the old law. This is probably due, in part, to the new-law incentives for returning injured employees to work, as well as to more aggressive efforts by insurance companies and employers to return employees to work as soon as possible after an injury.

In this data again, although all three size categories shows gains, small business are showing greater percentage gains (from a poorer base) and are apparently closing the loss-control gap between themselves and larger businesses.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>

X. Claims Referred to Rehabilitation:

A. <u>Total claims referred</u>	103	10	91	9
1. Small business	45	43.7	31	34
2. Medium business	29	28	18	19.8
3. Large business	29	28	42	9.9

This section includes all claims on which a rehabilitation referral has been received by the Department. The decrease shown for all business sizes in the number and percentage of cases referred to rehabilitation in 1984 is not discouraging, since return-to-work rates are better for the 1984 cases. This may be due to more discriminating use of paid professional rehabilitation by cost-conscious employers and insurers.

B. <u>Average time-between injury and referral for all cases</u>	153	125
1. Small business	157	118
2. Medium business	162	127
3. Large business	138	130

The time between injury and referral to rehabilitation is defined as the time between the date of injury and the receipt of an R-1 Form (Insurer's Answer to a Request for Rehabilitation). When that form was not in the file, the date of receipt for the R-4 Form (Employee's Request for Rehabilitation) was used. In cases in which no R-1 or R-4 has been received, an R-2 Form (Filing of the Rehabilitation Plan) was taken as the referral time. Although cases in all three business-size categories were referred to rehabilitation faster in 1984 than they were in 1983, small businesses seemed to be doing the best job of all. This further dispels the fear that small businesses would not be able to benefit under the new law.

One discouraging aspect of this data is the reduction in referrals in the first 60 days after the injury. This probably reflects a great cost-consciousness on the part of employers and insurers, many of whom are learning to accomplish prompt return to suitable, gainful employment in easier cases without professional QRC assistance. Since the number of referrals by 90 days and six months have increased, it may not be cause for alarm.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
<u>C. Number of cases referred by duration</u>				
1. Small business				
a. Referred within 30 days	1	2	0	0
b. Referred within 60 days	9	20	4	13
c. Referred within 90 days	14	32	13	43
d. Referred within 180 days	31	70	25	83
e. Referred within 360 days	40	91	30	100
f. Referred within 360 days	4	9	0	0
2. Medium business				
a. Referred within 30 days	2	7	0	0
b. Referred within 60 days	2	7	1	6
c. Referred within 90 days	8	28	8	44
d. Referred within 180 days	24	83	13	72
e. Referred within 360 days	25	86	18	100
f. Referred within 360 days	4	14	0	0
3. Large business				
a. Referred within 30 days	1	3	0	0
b. Referred within 60 days	5	17	2	5
c. Referred within 90 days	8	28	14	34
d. Referred within 180 days	23	79	31	76
e. Referred within 360 days	28	97	41	100
f. Referred within 360 days	1	3	0	0

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>

D. Referred claims resulting in return to work (RTW)

1. Small business	24	53.5	31	100
2. Medium business	21	72.4	7	38
3. Large business	20	69	21	50

This includes all cases referred to rehabilitation and resulting in a return to work. These numbers are probably too small for drawing meaningful conclusions, especially from the 1984 sample, because only nine months have elapsed since the date of injury. The Department plans a more detailed study of rehabilitation outcomes and the factors affecting them, to be completed by this summer.

E. Percentage of general sample cases still open as of January 27, 1985, which have not been referred to rehabilitation with no return to work

0 0

No such cases were found in these samples, which is a very positive sign suggesting that cases are being referred to rehabilitation appropriately and in a timely manner. This would not have been the case just a few years ago when cases open for years without rehabilitation referral were not unusual.

XI. Average Temporary Total Disability Paid on Claims:

1. Small business	\$1,572.23	\$1,075.25
2. Medium business	\$2,030.54	\$1,199.11
3. Large business	\$1,617.85	\$ 867.15

This is the average of all Temporary Total Disability benefits paid for all claims, whether these claims are opened or closed.

Every business-size category experienced a decrease in the 1984 sample in the amount of Temporary Total Disability benefits paid on claims. As cases mature, these numbers likely will increase, especially for the 1983 data, which has more long-term, still open cases not yet included in these averages.

PERMANENT PARTIAL DISABILITY OPEN CLAIM STUDY

Permanent Partial Disability (PPD) benefits were a major cost factor in the Minnesota workers' compensation system before the 1983 Reform Act. In fact, a 1982 Minnesota Insurance Division Study found the average cost of Permanent Partial Disability claims was 51 percent higher and the average duration of such cases 44.9 percent longer than they were in Wisconsin, a state with similar benefit levels and industrial mix. Minnesota's litigation rate was twice that of Wisconsin. These striking differences between the two states contributed to approximately a 70-percent higher average workers' compensation insurance rate in Minnesota than in Wisconsin in 1980.

Earlier studies concluded that contributing to the problems of prolonged disability, high litigation and high workers' compensation costs were the subjective determination of Permanent Partial Disability ratings and the lack of incentives to encourage employers and workers to return injured workers to work after they had recovered.

The 1983 Minnesota Workers' Compensation Reform Act attempted to address these problems using a Schedule of Permanent Partial Disability to determine the percent of disability from a permanent injury. This highly specific objective schedule translates medical conditions into a percentage of disability of the whole body based on objective medical evidence and should give the same result for a given condition, regardless of any subjective considerations on the part of the medical provider doing the rating.

The goal of this schedule is to prevent litigation over the degree of disability. Before January 1, 1984, disputes over degree of disability accounted for about half of the workers' compensation litigation in Minnesota.

The 1983 two-tier benefit system is another change designed to reduce the factors leading to high workers' compensation costs for employers and employees. This benefit system applies only to cases in which there is some permanent disability. The size of the employee's Permanent Partial Disability (PPD) award depends on whether the employer offers the employee a suitable job before 90 days after Maximum Medical Improvement is reached. If the employee gets a suitable job offer within this time limit, he or she is entitled to a smaller PPD award than if there were no suitable job offer. This smaller award is called Impairment Compensation. If the employee is not offered a suitable job, a much larger PPD award called Economic Recovery Compensation is paid.

How the award is paid depends on whether the employee returns to work. If he or she does, either at a job offered by the employer or one found independently, the employee receives the award as a lump sum 30 days after successfully returning to work. If not, weekly benefits still end as of the date of the job offer or 90 days after Maximum Medical Improvement (MMI). If there is no job offer, the employee begins receiving his or her Permanent Partial Disability award in installments

in the same amount and frequency as his or her weekly benefits. This continues until the award is exhausted or the employee returns to work, in which case he or she receives any unused amount of the award 30 days later.

This study attempts to determine the effect of these major changes in the law on Permanent Partial Disability awards.

It was originally anticipated that this information could be gathered from the Business-Size Open Claim Study. However, because there were so few claims with Permanent Partial Disability in that study's samples, reliable generalizations could not be drawn. Therefore, to improve the data base, samples for this study were drawn of all Permanent Partial Disability awards reported so far by insurers for injuries that occurred in either March 1983 or March 1984. Business size was determined for these claims in the same way it was for the Business-Size Open Claim Study. This should be considered an open claim study because many of the cases are still considered open from either a rehabilitation or insurer perspective.

Of all three studies, the PPD Open Claim Study presents the greatest problem of data immaturity. As a rule, injuries with Permanent Partial Disability are more serious, requiring more time to heal, be rated and work through the system. Although the data is immature and, therefore, not entirely reliable, there is still reason to think some of the trends identified reflect real changes in activity in the system.

STUDY RESULTS

	<u>D.O.I.- March '83</u>		<u>D.O.I.- March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
I. <u>Origin of PPD Award Data:</u>				
A. <u>Total Awards to date</u>	271	100	88	100
1. Small business (0-50)	102	37.6	41	46.6
2. Medium business (51-249)	73	26.9	13	14.7
3. Large business (250+)	96	35.4	34	38.6

There are more than three times as many Permanent Partial Disability awards for claims originating in March 1983 than for those originating in March 1984. This is not especially significant and is due in large part to the fact that many March 1984 injuries, which will eventually result in Permanent Partial Disability awards, have not yet healed enough to be rated and reported. Some reduction in the frequency of PPD awards is expected, due to the impairment schedules, and is evident in the Closed Claim Study.

All of the Permanent Partial Disability awards in the 1984 sample were Impairment Compensation awards. This means that 100 percent of the March 1984 claimants who were awarded PPD benefits as of January 1985 were offered suitable jobs upon recovery. This suggests the new law is accomplishing what it was designed to do.

In fact, of more than 1,000 Permanent Partial Disability awards paid for new-law injuries as of January 21, 1985, only two were Economic Recovery awards.

Benefit levels for Permanent Partial Disability awards under the new law were set so that if 80 percent of the awards were Impairment and 20 percent Economic Recovery, there would be no net change in the cost of Permanent Partial Disability awards. To the extent that more than 80 percent are Impairment awards, savings can be expected because Impairment awards are less than Economic Recovery awards for the same injury.

	<u>D.O.I. March '83</u>		<u>D.O.I. March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
II. <u>Status of PPD Claims:</u>				
A. <u>Awards without lost time</u>	32	11.8	14	15.9
1. Small business	12	11.8	7	17.1
2. Medium business	9	12.3	2	15.4
3. Large business	11	11.5	5	14.7
B. <u>Awards with return to work</u>	232	85.6	68	77.3
1. Small business	86	84.3	30	73
2. Medium business	62	84.9	10	76.9
3. Large business	84	87.5	28	8
C. <u>Awards with no lost time or return to work</u>				
1. Small business	98	96.1	37	90.1
2. Medium business	71	97.2	12	92.3
3. Large business	95	99	33	97.1

These categories include all claims in which a Notice of Discontinuance or a rehabilitation form has been filed indicating the employee has returned to work.

When the new law was first proposed, actuaries projecting the costs of the new system assumed that 80 percent of those workers with Permanent Partial Disability would return to work and 20 percent would not.

When the 1984 claims without any lost time are added to those of workers who have returned to work, the resulting percentage of the total 1984 Permanent Partial Disability claims substantially exceeds this 80-percent return-to-work projection; in fact, it exceeds 90 percent. Even the 1983 data, which is more mature than the 1984 data but involves claims filed when the law had no economic incentives for return to work, shows return to work or no lost time in more than 96 percent of these cases. This suggests there will be significant savings in the new system as a result of better return-to-work rates than had been expected, and such savings should benefit businesses of all sizes.

	<u>D.O.I.-March '83</u>		<u>D.O.I.-March '84</u>	
	<u>TOTAL</u>	<u>%</u>	<u>TOTAL</u>	<u>%</u>
D. <u>Awards still open</u>	1	.3	4	4.5
1. Small business	1	1	4	9.8
2. Medium business	0	0	0	0
3. Large business	0	0	0	0

Very few cases from either sample are still open. An open claim in this study is considered to be one in which the employee has not returned to work.

E. <u>Closed without return to work</u>	6	2.2	2	2.3
1. Small business	3	2.9	0	0
2. Medium business	2	2.7	1	7.7
3. Large business	1	1	1	2.9

This category includes 1983 claims in which a Notice of Discontinuance and 1984 claims in which a Notice of Intention to Discontinue was filed indicating no return to work and discontinuance of benefits was permitted. Very few cases fall into this category, even in the 1983 sample. This is encouraging, because this is the kind of case most to be avoided. Because none of the 1984 awards were Economic Recovery Compensation, these claimants must have declined job offers.

F. Open with return to work

1. Small business	0	0	0	0
2. Medium business	0	0	0	0
3. Large business	2	2	0	0

This category includes those claims in which a return to work has been reported but a rehabilitation plan is in progress or litigation is pending. Very few claims in the study are in this category. There are probably a number of Permanent Partial Disability (PPD) awards being litigated from March 1983 injuries, but until they are paid, they will not be reported to the Department. Virtually no litigation has been filed as yet over 1984 PPD awards.

	<u>D.O.I. - March '83</u>	<u>D.O.I. - March '84</u>
<u>TOTAL</u>	<u>\$</u>	<u>\$</u>

III. Size of PPD Award:

A. <u>Average award for all claims</u>	\$5,714	\$3,869
1. Small business	\$5,623	\$4,151
2. Medium business	\$5,180	\$3,115
3. Large business	\$6,215	\$3,816

The average amount of the Permanent Partial Disability award decreased substantially in 1984 from 1983. This is not especially significant and is probably because the 1984 sample claims involving only less serious injuries have had time to be rated. As claims involving more serious injuries work through the system, the size of Permanent Partial Disability awards for 1984 claims will probably increase.

IV. Size and Duration of TTD Award

A. <u>Average TTD award for all claims</u>	\$3,166	\$1,855
B. <u>Average duration in days</u>	121	69
1. Small business	129	76
2. Medium business	138	55
3. Large business	101	67

Award amounts were calculated from information on the Notices of Discontinuance or Notices of Intention to Discontinue. For cases in which no Notice of Discontinuance was received, the information was derived from rehabilitation files by multiplying the apparent lost time by the compensation rate for the individual employee. There has been a substantial reduction in the amount of Temporary Total Disability paid in 1984 from that paid in 1983. This may be due, at least in part, to a real decrease in duration of disability found under the new system; however, the immaturity of the data prevents the drawing of any reliable conclusions. Closed Claim Study results are more useful for answering these questions.

The average length of disability was calculated by dividing the Temporary Total Disability paid by the compensation rate divided by seven (for a seven-day week). The number was calculated for each case individually, rather than as an overall average.

<u>D.O.I. March '83</u>	<u>D.O.I. March '84</u>
<u>TOTAL</u> <u>§</u>	<u>TOTAL</u> <u>§</u>

C. Average weekly comp. rate

1. Small business	\$205	\$216
2. Medium business	\$212	\$204
3. Large business	\$235	\$259

This is an average of the weekly compensation rates used when determining benefit amounts for injured workers. On the whole, these rates rose in 1984, which suggests that average TTD awards have fallen because of the reduction in duration of disability in 1984, rather than because of other economic factors. The average weekly compensation rate for small businesses in 1984 is actually higher than the rate for medium-size businesses, which means that the argument that small businesses pay lower wages to their employees and, therefore, would not benefit as much from the two-tier system is not substantiated. While it is true that many small businesses pay minimum wage, these businesses are not usually involved in the more dangerous occupations, which produce most of the more serious injuries. Small businesses involved in dangerous occupations, such as logging, trucking and construction, tend to pay well above the minimum wage.

V. TPD Awards:

A. <u>Total TPD awards</u>	68	25	11	13
1. Small business	25	25	6	14
2. Medium business	18	24	1	1
3. Large business	25	26	4	12

Claims with Temporary Partial Disability benefit payments are very difficult to identify because this information is not reliably reported to the Department. Therefore, no definitive conclusions can be drawn from this data.

VI. Litigation:

A. <u>Total litigated claims</u>	19	7	0	0
1. Small business	6	5.9	0	0
2. Medium business	6	8.2	0	0
3. Large business	7	7.3	0	0

A litigated claim is defined in this study as one in which a claim petition of any kind has been filed. The data in the 1984 sample is too immature to reflect accurately the performance of the new law. Litigation may still be filed over some of these claims. The Closed Claim Study includes much more dependable and significant litigation data.

CLOSED CLAIM STUDY

This Closed Claim Study was conducted to gain a more complete perspective on the reformed Minnesota workers' compensation system and to verify the trends in the performance of the old and new workers' compensation systems. Although an open claim study is the most direct way to compare undiluted data from before and after the law was changed, it has serious limitations because of the immaturity of the data. Some of the most serious cases still remain open, even after some time, so averages underestimate the ultimate costs.

In a Closed Claim Study, a sample is chosen of claims that close in a given period of time, instead of claims with similar dates of injury. Such a sample will include many minor cases with relatively recent dates of injury, but it will also include older, larger claims, including some very old and very serious injuries that would not appear in an Open Claim Study of recent dates of injury.

A study of closed claims is the most accurate method to identify trends because the sampled claims have fully matured and represent a more typical distribution of injury severity. A Closed Claim Study, however, cannot establish as clearly the causes of the trends. In this study, for example, new-law claims cannot be separated from old-law claims, so the extent to which the trends identified are the result of the reformed law or other factors (such as improved claims handling) cannot be determined conclusively.

The results of the Closed Claim Study correlate well with the results of the Open Claim Studies, which do reflect the law changes more directly. This strongly suggests that the trends found in the Closed Claim Study are, at least in part, actual effects of the law changes.

For the purposes of this study, all claims reported to the Department as closed during the months of April and October 1983 and April and October 1984 were included in the data base. A claim was considered to have been closed when one of seven documents had been received by the Department from the insurer. These documents are described in detail in the Appendix. The filing of an additional document at a later date was considered evidence that the file had not been closed, and the file was eliminated from the study. The total number of cases closed in each of the study months was analyzed. Because of reporting inconsistencies by insurance companies, several thousand files in the samples were individually researched and reconstructed by compensation and rehabilitation specialists in the Department.

STUDY RESULTS

<u>Apr. '83</u>	<u>Oct. '83</u>	<u>Apr. '84</u>	<u>Oct. '84</u>
<u>TOTAL - %</u>	<u>TOTAL - %</u>	<u>TOTAL - %</u>	<u>TOTAL - %</u>

I. Total of Cases

<u>in-Sample:</u>	2,184	100	2,774	100	2,866	100	5,208	100
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The total number of claims reported in each month's data base reflects the different activity rates in closing cases. These rates normally vary somewhat from month to month, but two irregularities should be noted. The total number of cases shown as closed in April 1983 is lower than it actually was because a considerable number of closed claims were unretrievable: these claims were not recorded on the Department's computer system (which had gone on-line only six months earlier); had not been litigated, or had not been referred to rehabilitation. A significant percentage of cases six months old or older without rehabilitation or litigation would be expected and such cases would be more severe and costly than the average case in this sample. Although pre-September 1982 cases without rehabilitation or litigation were also omitted from the other three samples, they would be 12 or more months old. Very few cases of more than 12 months (for the October 1983 sample) have neither rehabilitation nor litigation, even less for those of more than 18 months (for the April 1984 sample) or 24 months (for the October 1984 sample). Since cases more than six months old will have higher costs than the average case, the April 1983 data actually understates the severity of workers' compensation costs at that time.

The number of claims closed in October 1984 far exceeds the number of claims in each of the other months. This was found to be an accurate reflection of the activity in the system. October historically has been an active month, and October 1984 was probably the most active month the Department has ever had in closing cases. Since the new law took effect, several hundred more cases have been closed than opened each month. This appears to be due to more aggressive management of older cases by insurers and employers, using the tools in the new law to help get workers back to work.

II. <u>Denials:</u>	107	4.9	106	3.8	142	4.9	182	3.5
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No distinction was made between proper and apparently improper denials. Nevertheless, the study shows the number of denials has decreased. This agrees with anecdotal information from insurance companies, which indicates fewer claims are being denied because they are more confident of an objective and fair result in the event of

litigation over Permanent Partial Disability: they can accept liability for medical and weekly indemnity without compromising their bargaining position.

<u>Apr. '83</u>	<u>Oct. '83</u>	<u>Apr. '84</u>	<u>Oct. '84</u>
<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>

III. No-Lost-Time

<u>Cases:</u>	1,004	46	1,157	41.9	1,092	38.1	2,063	39.6
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This category includes medical-only claims, those claims on which a First Report of Injury was filed but less than three days of work were lost, and a few Permanent Partial Disability-only claims. Reports of these cases are only required when they include Permanent Partial Disability. The large number of no-lost-time cases without Permanent Partial Disability is a result of efforts by both insurers and the Department to ensure all injuries are reported promptly, even when they might not result in lost time. Therefore, the size of these numbers depends more on reporting behavior than on actual activity in the system.

IV. Litigation:

A. Total cases litigated

	215	9.8	226	8.1	216	7.5	344	6.6
1. % New law	0	0	0	0	0	0	7	2
2. % Old law	215	100	226	100	216	100	337	98
3. % with PPD awards	179	83.2	188	83.1	159	73.6	213	61.9
4. Obj. Dis.	35	16.2	32	14.1	41	18.9	45	13

Because a high litigation rate is one of the major causes of high workers' compensation costs, this section of the study determined the rate and causes of litigation for each of the months in the study. For the purposes of this study, a litigated case is defined as a claim that has had any type of petition filed on it, even if the dispute is settled without a formal hearing.

The data shows a 32-percent reduction in litigation from April 1983 to October 1984. A similar reduction in litigation rates was also noted in the Business-Size Open Claim Study. However, because the Closed Claim Study analyzes mature data, these results are much more significant and reliable. This is a very promising sign that the costs of workers' compensation in Minnesota are declining.

In the first three sample months, the percent of new-law cases is very low. Therefore, the reduction in litigation may be assumed to be the result of administrative changes that accompanied the new law, including alternative dispute resolution methods which went into effect in July 1983, or of better claims management by employers and insurers. As time goes on, the objectivity of the schedule for rating Permanent Partial Disabilities and the incentives found in the new two-tier benefit structure should contribute to an even greater reduction in litigation, particularly over disputes involving Permanent Partial Disability awards. Even the October 1984 data, which includes many new-law cases, shows virtually no new-law litigation. Other Department studies indicate that less than five percent of pending litigation results from new-law injuries and virtually all new-law Permanent Partial Disability ratings are being resolved without litigation. The drastic drop in the percentage of litigated cases involving Permanent Partial Disability awards may reflect this effect.

The percentage of litigated cases with Objections to Discontinuance have already declined and should continue to fall, due to the success of alternative methods now available to resolve such disputes.

<u>Apr. '83</u>	<u>Oct. '83</u>	<u>Apr. '84</u>	<u>Oct. '84</u>
<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>

V. TTD Data:

A. Total cases with

<u>TTD</u>	1,180	54	1,618	58.3	1,774	61.9	3,094	59.4
1. Avg. duration	165	days	137	days	126	days	118	days
2. Avg. rate	\$203		\$208		\$213		\$217	
3. Avg. amount	\$3,845		\$2,992		\$3,296		\$3,069	

B. Total cases with TTD less than:

1. 30 days	676	57.3	979	60.5	967	54.5	1,634	57.8
2. 60 days	869	73.6	1,250	77.2	1,275	71.9	2,149	69.5
3. 90 days	941	79.7	1,330	82.1	1,398	78.8	2,389	77.2
4. 6 months	1,006	85.3	1,431	88.4	1,557	87.8	2,686	86.8
5. 12 months	1,049	88.7	1,493	92.3	1,655	93.3	2,895	93.6
6. Over 12 months	133	11.3	125	7.7	119	6.7	199	6.4

This category includes all those cases in which Temporary Total Disability (TTD) was reported. The percentage of cases with TTD has increased slightly from April 1983 to October 1984. This figure is just the reverse of the percentage of no-lost-time cases; it is a reflection of reporting behavior in the system.

The average length of lost work time due to a work-related injury has dropped to 118 days in October 1984 from 165 days in April 1983. This reduction parallels the one found in the Business-Size Open Claim Study but, by the nature of this study, is much more significant and reliable.

The average duration of disability was calculated by dividing the Temporary Total Disability paid by the weekly compensation rate for each case divided by seven (for a seven-day week).

The average weekly compensation rate is included in this data simply as a reference point. It has risen gradually over the 18 months spanned by this study. This suggests that reductions in the amount of benefits reflect a lower average duration of disability rather than some unrelated factor. This kind of reduction is seen in the average amount of Temporary Total Disability benefits, which declined 20 percent from April 1983 to October 1984.

One irregularity in this data should be noted. The average amount of Temporary Total Disability benefits paid in cases that closed in October 1983 is lower than any other month in the study. It was determined that this was an accurate reflection of the activity in the system at that time. An unusually high proportion of very old cases closed in October 1983, because this is the first month in the study following the implementation of administrative conferences. When these conferences first went into effect, insurance companies sought them in a large number of old cases in the hopes of encouraging the workers to follow a rehabilitation plan or return to work. As a result of this activity, a large number of workers returned to work and their cases subsequently were closed. Such cases often have unusually low average compensation rates because they involve very old injuries. Therefore, they contribute to lengthening the average duration of disability without raising average costs as much.

<u>Apr. '83</u>	<u>Oct. '83</u>	<u>Apr. '84</u>	<u>Oct. '84</u>
<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>

VI. PPD data:

<u>A. Cases with</u>								
<u>PPD</u>	309	14.1	367	13.2	415	14.4	604	11.6
1. Avg. amt. PPD award	\$8,315		\$7,774		\$7,852		\$6,969	
2. Avg. amt. TTD	\$11,339		\$9,631		\$10,080		\$8,600	
3. Avg. duration TTD	515 days		480 days		408 days		365 days	
4. Avg. TTD rate	\$182		\$193		\$200		\$203	
5. Litigated	157	50.8	168	45.8	158	38.1	212	35.1

The relative frequency of cases with Permanent Partial Disability benefits dropped for October 1984 data. This is the first sample with a significant number of new-law cases, and the reduction is probably due to the more objective schedules for rating disability under the new law. The disability schedules do not permit ratings when there is no objective medical evidence of permanent injury. They are also expected to reduce the frequency of "nuisance" awards paid by insurers fearful of the uncertain outcome of litigation in cases where there is no real Permanent Partial Disability by making outcomes much more predictable.

The average amount of Permanent Partial Disability benefits came down significantly to \$6,969 in October 1984 from \$8,315 in April 1983. Part of this reduction is probably due to the decrease in litigation and faster, more successful returns to work. The largest reduction in these costs came in October 1984, a month with the highest percentage of new-law awards in it. This is probably the result of the relative frequency of Impairment awards being greater than the predicted 80 percent due to the better-than-expected experience of employers and insurers in returning injured workers to suitable, gainful employment (see the PPD Open Claims Study).

Although the reduction in benefits would seem to leave injured employees with less compensation, this condition is ameliorated in two ways. First, more employees are getting suitable, gainful employment and will become self-sufficient again. Benefits in no state are high enough to compensate an employee adequately for a lifetime disability. Secondly, Permanent Partial Disability awards are being obtained without litigation in many more cases with a resultant savings to the employee in attorney's fees. The attorney's fee on the average Permanent Partial Disability award (if litigated) is significantly more than the drop in the average size of the award. The savings to an employee from not having to hire an attorney exceeds the reduction in the average size of the award.

The average amounts of Temporary Total Disability and lost time are down substantially for the Permanent Partial Disability cases in October 1984, again by about one-third. This reduction is very encouraging and is consistent with the other data in the study, as well as with the Open Claim Study results.

The litigation rate for cases with PPD awards has decreased 31 percent from April 1983 to October 1984. Cases with Permanent Partial Disability awards usually involve more serious injuries, so the decline in litigation for these claims is a very promising sign. It may be too early to assign credit for this reduction to the new-law benefit changes alone. Most probably, it is due also to the new administrative procedures, which were instituted in July 1983, and to better claims handling by insurers. Regardless of the causes, this reduction should prove to be a major cost-saving factor.

	<u>Apr. '83</u>	<u>Oct. '83</u>	<u>Apr. '84</u>	<u>Oct. '84</u>
	<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>	<u>TOTAL %</u>

VII. TPD Data:

A. <u>Cases with TPD</u>	163	7	219	8	322	11.5	648	12.4
B. <u>Avg. amount</u>	\$1,577		\$748		\$1,303		\$703	

The reporting of Temporary Partial Disability benefits is thought to be inadequate and unreliable. While conclusive generalizations cannot be made, such reporting is more reliable on closed cases than on open cases and this data is probably better than that in the other two studies. An increase in frequency of TPD cases is to be expected as employers become more aggressive at returning workers to light-duty jobs and will partially offset the savings in TTD.

VIII. Cases with Rehabilitation:

A. <u>Total cases</u>	111	9.4	134	8.3	210	11.8	418	13.5
B. <u>Return to work</u>	76	68.4	105	78	165	78	351	84
C. <u>RTW when referred less than:</u>								
1. 90 days	15/17	88.2	39/46	85	80/90	88.9	163/179	91.1
2. 180 days	8/14	57	27/34	79	36/43	83.7	101/115	87.8
3. More than 180 days	22/28	78	37/41	90	49/64	76.5	108/135	80
D. <u>%RTW for D.O.I.</u>								
1. Pre-9/1/82		66.7		74.6		64.7		75
2. Between 9/1/82 1/1/84		88.9		82.5		87		88.5
3. Post 1/1/84		0		0		0		84
E. <u>Time to referral less than:</u>								
1. 30 days	2	3.4	7	5.8	9	4.6	21	4.9
2. 60 days	9	15.3	26	21.5	53	26.9	105	24.5
3. 90 days	17	28.9	46	38	90	45.7	179	41.7
4. 180 days	31	52.7	80	66.1	133	67.5	294	68.5
5. 360 days	41	69.6	100	82.6	161	81.7	362	84.4
6. More than 360 days	18	30.5	21	17.4	36	18.3	67	15.6

This category of data includes all those cases which have been referred to rehabilitation at any time during their progress through the system.

One goal of this study was to develop adequate information about the performance and success of rehabilitation in the Minnesota's workers' compensation system and the impact on outcomes of such factors as referral time and benefit incentives. However, the relatively small number of cases means results are not conclusive enough to be useful. The Department will be conducting a separate Closed Claim Rehabilitation Study, to be completed this summer.

One interesting aspect of this data, however, is the percentage of return to work for different dates of injury. As one would expect, relatively recent cases have a much higher return-to-work rate than the very old cases, which sometimes went a year or more before being referred to rehabilitation. This is consistent with the theory that the rehabilitation success rate is higher the earlier a case is referred.

APPENDIX

DATA SOURCES

Business-Size Open Claim Study

This was an Open Claim Study of data taken from Department files. Random samples of 1,000 claims with dates of injury of March 1983 and March 1984 were selected. There is no standard definition for business size, so for the purposes of this study, the following definitions were used: a small business was defined as one with 0 to 50 employees, a medium-size business as one with 51 to 249 employees, and a large business as one having 250 or more employees.

Small businesses are often defined as those with ten or fewer employees or 20 or fewer employees. Such businesses constitute a large proportion of the businesses in Minnesota, but they contribute relatively few injuries to the data base. The size definition of 0 to 50 was chosen to assure an adequate sample of injuries from small businesses so reliable statistical conclusions could be drawn. The sizes of the businesses in the sample were determined from Dunn & Bradstreet lists, with supplementary information based on individual knowledge of larger companies and telephone calls to other companies. Business size was determined for approximately 88 percent of the claims from both March 1983 and March 1984. Random samples were then selected by computer based on the ratio of small, medium and large businesses in each month's data base. For example, 28 percent of the March 1983 claims originated in small businesses; therefore, the March 1983 sample includes 280 claims from small businesses.

Data was obtained from Departmental computer files, which include information from First Reports of Injury, First Payment Notifications, First Medical Reports, Notices of Discontinuance and other forms filed with the Department by self-insured employers and insurers.

When information from the computer file was incomplete, the paper files were examined individually, and in some cases, reference was made to rehabilitation files to determine the progress of the cases, Where rehabilitation files provided inadequate information about the outcome of the case, the qualified rehabilitation consultant in charge of the case was contacted to find out what had happened.

II. Status of Claims:

A. Claims with no lost time

This category includes claims on which a First Report of Injury was filed but no First Payment Notification was filed and there was no evidence of either Temporary Total or Temporary Partial Disability benefits having been paid. This also includes claims in which Permanent Partial Disability awards had been paid but no Temporary Total or Temporary

Partial Disability benefits. These cases were examined by hand and found to be mostly injuries, such as hearing loss, which had resulted in Permanent Partial Disability but no lost time.

B. Claims with return to work

This information was obtained from Notice of Discontinuance forms for March 1983 claims and from Notice of Discontinuance or Notice of Intention to Discontinue forms for March 1984 claims. In some cases in which Notices of Discontinuance had not been filed, reference was made to the rehabilitation files and information about return to work was obtained from the R-8 rehabilitation form, if that was present.

C. Claims still open

This category includes claims in which the employee is still receiving Temporary Total Disability benefits. It also includes cases in litigation or in which a rehabilitation plan is still in progress, even though the employee has returned to work. Claims in which the employee had returned to work but a Permanent Partial Disability award was still pending or Temporary Partial Disability benefits were being paid are not included in this category. Reporting of Temporary Partial Disability benefits is not adequate to draw conclusions about their payment in these cases, so substantial number of cases that insurers would consider open were not considered open for the purposes of this question.

D. Cases closed with no return to work

This category includes those cases for which a Notice of Discontinuance had been filed in 1983 indicating no return to work or a Notice of Intention to Discontinue had been filed in 1984, the discontinuance was permitted and no later litigations filed.

E. Cases open with return to work

This category includes those cases in litigation or in which a rehabilitation plan was still in progress, even though there has been a return to work. This includes a few, but by no means all, of the cases in which Temporary Partial Disability benefits are being paid; because of poor reporting, it was not always possible to identify them.

III. Truncated Sample Data:

In order to obtain comparable samples of truly closed claims from each year from which to draw conclusions about the average duration of disability and the cost of Temporary Total Disability benefits, the 96 percent of the cases showing the

shortest duration of Temporary Total Disability benefits were selected. Cases still open were treated as being of longer duration than all closed cases for the purpose of this sample. Eliminating the four percent of the cases with the longest Temporary Total Disability duration from each sample, deleted all cases in which there was, as yet, no return to work. The 96 percent of lost-time cases remaining should be a comparable sample of closed lost-time cases with a similar distribution of injury severity.

The average duration of disability was determined by dividing the Total Temporary Total Disability benefits reported in each case by the weekly compensation rate for that individual case and multiplying the result by seven (for a seven-day week), rather than dividing averages by averages for all cases.

The average Temporary Total Disability award was taken directly from the Notices of Discontinuance. If a notice was not filed, the case was reconstructed from the rehabilitation file by Department rehabilitation specialists, who estimated the amount of Temporary Total Disability paid by multiplying the amount of lost time by the compensation rate.

IV. TTD Data:

A. Claims With No Temporary Total Disability

This category includes all claims in which no Temporary Total Disability benefits were paid, even if some Temporary Partial Disability or Permanent Partial Disability benefits were paid.

B. Claims With Temporary Total Disability

This category includes those claims in which Temporary Total Disability benefits were paid according to reports in the Department's files. The average lost time in days was calculated for these samples just as it was for the samples in the truncated sample data: that is, by dividing each case by the weekly compensation rate and multiplying that by seven (for a seven-day week). The average includes all cases which had closed or returned to work, but does not include cases in which the claim was still open with no return to work since the total amount of Temporary Total Disability benefits had not yet been reported for such cases.

V. Denied Claims:

This category includes all reports of primary denial of liability by insurers to the Department, whether or not liability was later accepted.

VI. Litigated Claims:

This category includes all claims on which any type of claim petition was filed at any time during the life of the claim. It does not include claims in which administrative conferences, mediation sessions and other nonadversarial dispute resolutions were requested, but it does include cases in which claim petitions were filed and later withdrawn due to settlement. Such cases are considered by the Department to be litigated, even though they do not go to hearing, because they have been moved into the formal adversarial arena.

VII. PPD Data:

A. Permanent Partial Disability Awards

This category includes all those cases from the two samples for which the report of a payment of a Permanent Partial Disability award was received.

B. Lost-time Claims with Permanent Partial Disability

This category includes those claims which have both a Permanent Partial Disability award and a Temporary Total Disability award. Permanent Partial Disability awards are reported to the Department by a Notice of Discontinuance, and as a result, they always include information about Temporary Total Disability benefits even when the case is not yet closed. An analysis of Permanent Partial Disability awards in cases in which no lost time was reported indicated the computer information was correct and the Permanent Partial Disability awards were for such injuries as hearing loss, which had resulted in no lost time.

VIII. Claims With Temporary Partial Disability Paid:

This category includes all claims for which a report of Temporary Partial Disability benefits was received. Since notices of return to work frequently include information about Temporary Total Disability benefits, these statistics are considered unreliable. The Department's Records and Compliance staff believe that reporting of Temporary Partial Disability benefits is not adequate to draw conclusions.

IX. Return to Work:

Percentages in this sample are taken from the base of cases which show some Temporary Total Disability benefits paid at some time. Total lost time is determined by taking the total Temporary Total Disability benefits paid divided by the weekly compensation rate divided by seven. The time is shown in days,

based on a seven-day week. "Less than 30 days" indicates claims with less than 30 days of Temporary Total Disability benefits paid, and so on.

X. Claims Referred to Rehabilitation:

This category includes all cases in which a rehabilitation referral has been received by the Department. Time between injury and referral has been taken to be the time from the date of injury to the "Insurer's Answer to a Request for Rehabilitation" or the filing of an R-2 "Rehabilitation Plan" form, whichever comes first. In cases in which no insurer's answer has been received, the employee's Request for Rehabilitation is taken as the referral time. "Referred Claims Resulting in Return to Work" includes only those claims which have a return to work by the time the sample was taken in January 1985. No attempt was made to determine how many claims with rehabilitation had closed without a return to work, and it is believed that most claims not falling into this category are claims that are still open from the point of view of the rehabilitation program and return to work is still anticipated.

E. The percentage of general sample cases still open as of January 27, 1985 that have not been referred to rehabilitation:

This category includes all those cases which show no return to work or no closing without a return to work but have not been referred to rehabilitation. No such cases were found in either sample.

XI. Average Temporary Total Disability Paid on Claims:

This is the average of dollar awards for Temporary Total Disability for all claims open and closed. As open cases continue to close in this sample, it is likely these numbers will rise, probably more for the 1983 sample, which has more open claims.

Permanent Partial Disability Open Claim Study

To take a more detailed look at Permanent Partial Disability awards, which are those awards affected most by the new two-tier system, samples were drawn of all Permanent Partial Disability awards reported so far for injuries that occurred in either March 1983 or March 1984. Business size was determined for these samples in the same way as in the Business-Size Open Claim Study. This is also an Open Claim Study, since many of these cases are still open from both the point of view of the insurer and the status of rehabilitation. The total number of Permanent Partial Disability awards to date shows a much larger number for March 1983 than for March 1984. This is probably due in large part to the fact that many March 1984 injuries which will result in Permanent Partial Disability awards have not yet healed enough to be rated and reported.

II. Status of PPD Claims:

A. Permanent Partial Disability Awards Without Lost Time

This category includes cases in which a Permanent Partial Disability award was reported but no Temporary Total Disability benefits were paid. Upon examination, these cases appear to be correctly reported as no-lost-time cases because the injuries are most frequently hearing loss or some other injury which did not result in an actual loss of time from work.

B. Awards With Return to Work

This category includes all those cases in which a Notice of Discontinuance or a rehabilitation form has been filed indicating the employee has returned to work.

E. Closed Without a Return to Work

This category includes those cases in which the Notice of Discontinuance for 1983 claims or the Notice of Intention to Discontinue for 1984 claims has been filed indicating no return to work and the discontinuance was permitted.

F. Open With a Return to Work

This category includes those cases in which a return to work has been reported but a rehabilitation plan is in progress or litigation is pending.

III. Size of Permanent Partial Disability Award:

The size of Permanent Partial Disability awards was taken from insurers' reports submitted with Notices of Discontinuance. The large difference between 1983 and 1984 averages is probably due in part to the fact that only the smaller injuries for 1984 have yet been reported.

IV. Size and Duration of Temporary Total Disability Award:

This was calculated from Notices of Discontinuance or Notices of Intention to Discontinue. For cases in which no Notice of Discontinuance was received, the information was derived from rehabilitation files by multiplying the apparent lost time by the compensation rate for the individual employee. The average duration of disability in days was calculated by dividing the Temporary Total Disability paid by the compensation rate divided by seven (for a seven-day week). The number was calculated for each individual case separately, not as an overall average. The average rate refers to the average Temporary Total Disability compensation rate per week determined either from the First Report of Injury, the First Payment Notice, or the Notice of Discontinuance.

V. Temporary Partial Disability Awards:

The total number of Temporary Partial Disability awards was determined from the Notice of Discontinuance and Notice of Intention to Discontinue forms and rehabilitation reports. These reports are considered to be an underestimate of the actual number of Temporary Partial Disability awards being paid, because the reporting of these awards is the most unreliable of various insurance company reporting activities with the Department.

VI. Litigation:

This category includes any case in which a formal claim petition had been filed at any time. Cases in which claim petitions were filed but which were settled before they came to a formal hearing were included because those cases had entered a formal adversarial arena. Cases which involved an administrative conference, a mediation session or other nonadversarial dispute resolution proceeding were not included.

Closed Claim Study

For the purposes of this study, all claims reported to the Department as closed during the months of April and October 1983 and April and October 1984 were included. Departmental reports interpreted as indicating closed cases included:

1. Notices of Discontinuance;
2. Notices of Intention to Discontinue in which the discontinuance was permitted;
3. First Reports of Injury indicating no lost time;
4. First Payment Notifications indicating small Temporary Total Disability awards with no further activity in the file for more than nine months after the first payment;
5. First Payment Notifications with no further activity in the file, where a detailed examination of the file indicated a trivial injury and a likelihood the employee had returned to work even though a Notice of Discontinuance had not been filed;
6. R-8 rehabilitation forms closing out rehabilitation where an examination of the rehabilitation file determined the file is actually closed; and
7. Orders from the Office of Administrative Hearings or the Department's settlement judges settling cases where an examination of the file indicated the case was closed.

For cases in which lump-sum settlements had been awarded either as Stipulations for Settlement or by court orders and those lump sums could not, upon analysis, be broken down simply into dollar amounts for Temporary Total Disability benefits, Permanent Partial Disability benefits, medical benefits and so on, the following "rule of thumb" was used: 20 percent of the lump sum award was considered to be for medical benefits and was not included in this study; 25 percent was considered to be for Permanent Partial Disability awards and was calculated into the averages for Permanent Partial Disability awards; 55 percent was considered to be for Temporary Total Disability benefits and was included in the averages for Temporary Total Disability benefits. This system was used for all four months of the Closed Claim Study and was based on the breakdown of benefits determined by the Department of Insurance in the 1982 Study of Workers' Compensation. It was not necessary to use this procedure in the Business-Size Open Claim Study because of the lack of lump-sum settlements and stipulations. Cases from the Business-Size and Permanent Partial Disability Open Claim Studies have not proceeded far enough in litigation to have stipulated lump-sum awards.

In each of these cases, the filing of an additional document at a later date was considered evidence the file had not, in fact, been closed and the file was eliminated from the study. The total number of cases in this sample reflects, in part, varying activity rates in the Department in closing cases. Since the new Workers' Compensation Law took effect July 1, 1983, the number of cases closed for the Department's purposes has exceeded the number of cases opened by several hundred every month. In addition, October is an unusually active month, and October 1984 was the most active month the Department has ever had in closing cases.

II. Denials:

This category includes those cases in which a Primary Denial of Liability was filed by the insurance company, whether or not benefits were later paid on those cases.

III. No-Lost-Time Cases:

This includes those cases which show no payment of either Temporary Total Disability or Temporary Partial Disability benefits. In some cases, there may be payment of Permanent Partial Disability awards. Such cases are only required to be reported to the Department when they include Permanent Partial Disability awards. However, the large number of reported no-lost-time cases is a result of efforts by both the Department and insurers to ensure that injuries are reported promptly, even when it is unlikely that lost time will result. As a result, the size of these numbers depends more on reporting behavior than actual activity in the system. There are many more no-lost-time cases than are indicated in this sample occurring each month, but most are not reported to the Department.

IV. Litigation:

This category includes all those cases in which a claim petition has been filed at any time, even if the claim petition was resolved by a settlement before a formal hearing. This does not include cases in which there was a nonadversarial dispute resolution proceeding, such as an administrative conference or mediation session. New-law cases are those in which the injury occurred after January 1, 1984, which means the Permanent Partial Disability schedules and new-law benefits would apply. Old-law cases include all older cases.

The number of cases with Permanent Partial Disability awards includes those in which an examination of the file indicates a Permanent Partial Disability award was paid.

Objections to Discontinuance include those cases in which a formal claim petition objecting to the discontinuance of Temporary Total Disability benefits was filed. It does not include cases in which an employee objected to Notice of Intention to Discontinue and requested an administrative conference, unless that employee later requested formal litigation by filing a claim petition.

V. Temporary Total Disability Data:

Cases with Temporary Total Disability include all those cases in which Temporary Total Disability benefits were reported to the Department at any time during the life of the case. The average duration of disability was determined by dividing the total dollar amount of Temporary Total Disability benefits by the weekly compensation rate divided by seven (for a seven-day week). This calculation was done for each individual case and an average taken of the number of lost-time days derived.

The average weekly compensation rate was derived from cases in which Temporary Total Disability benefits were paid. No attempt was made to weigh the rate for longer or shorter duration of disability cases. The average amount of Temporary Total Disability (TTD) benefits paid is taken directly from the claim files, except where information on TTD benefits was not included on a Notice of Discontinuance. In these cases, the number has been reconstructed from the rehabilitation files by multiplying the lost time indicated in the rehabilitation file by the Temporary Total Disability rate. It was rarely necessary to make this determination. Cases with Temporary Total Disability of less than 30 days and so on were identified by the duration of Temporary Total Disability, calculated as above.

VI. Permanent Partial Disability Data:

This category includes all those cases in which an award of Permanent Partial Disability at any time during the life of the case was reported.

The average amount of Permanent Partial Disability awards was taken directly from the information on the Notices of Discontinuance or settlements or court-ordered agreements from the litigated cases.

The average amount of Temporary Total Disability awards was determined in the same way.

The average duration of Temporary Total Disability was determined by dividing the actual dollar amount of Temporary Total Disability benefits by the weekly compensation rate divided by seven in each individual case.

The average Temporary Total Disability rate is the last rate at which Temporary Total Disability benefits were paid as reported from the First Report of Injury, the First Payment Notification, or the Notice of Discontinuance.

The number of cases with Permanent Partial Disability which were litigated includes all those cases in which Permanent Partial Disability awards were paid and a claim petition was filed at any time during the life of that case, whether or not the issue led to a formal hearing.

VII. Temporary Partial Disability Data:

This category includes all cases in which Temporary Partial Disability benefits were reported. This reporting is considered to be inadequate. The Department's Records and Compliance staff believes that some cases of Temporary Partial Disability are not reported to the Department on the Notice of Discontinuance, which shows return to work. The average of Temporary Partial Disability benefits is thus probably not completely reliable in this study, although it is probably more reliable than the data in the open claim studies.

VIII. Cases With Rehabilitation:

This category includes all those cases in which a referral to rehabilitation occurred at any time during the progress of the case.

Cases with return to work include those in which the R-8 rehabilitation form indicates a return to work at the completion of the rehabilitation plan, and cases that did not have an R-8 form but a survey of the file or a telephone call to the qualified rehabilitation consultant in charge of the case indicated the employee had returned to work.

Breakdowns on return to work for various referral times reflect the time between the date of the First Report of Injury and the date of referral to rehabilitation as evidenced by an R-1 "Insurer's Answer to a Request for Rehabilitation" form, an R-4 "Request for Rehabilitation" form, or an R-2 "Filing of Rehabilitation Plan" form.

The percentage of return to work for dates of injury before September 1, 1982, includes many cases in which, before the correction of the Strandmark decision, referral to rehabilitation was spotty and often delayed. For dates of injury between September 1, 1982, and January 1, 1984, rehabilitation administrative procedures were operating fairly smoothly, but new-law benefits were not yet in effect. Cases after January 1, 1984, include those cases in which new-law benefits were in effect.