

NEW YORK DISABILITY BENEFITS LAW INSURANCE  
EXPERIENCE 1951-1954

BY

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In my 1950 paper on D.B.L. Insurance,<sup>1</sup> I outlined the D.B.L. coverage, as also the assumptions made in developing rates. Since that time there have been a number of changes in the Law and regulations, and we also have the actual experience available for the past four years. The main purpose of this paper is to make available a tabulation of the actual experience as reported to the New York Insurance Department,<sup>2</sup> to compare the original assumptions made at the time the rates were developed with the actual experience on this type of insurance, and to report other developments in this field.

The statistics reported to the New York Insurance Department are reported separately for Precisely Statutory Coverage, Substantially Statutory Coverage, and Plan Coverage (other than Substantially Statutory Coverage).

Precisely Statutory Coverage provides the exact coverage required by the Disability Benefits Law,<sup>3</sup> namely, a weekly benefit equal to 50% of an employee's wages beginning with the 8th day of non-occupational disability with a minimum benefit of \$10.00 a week, or the actual wages whichever is lower, and a maximum of \$33.00 a week for a maximum period of 13 weeks for any disability, or during a period of 52 consecutive calendar weeks (excluding disability due to maternity) for any disability which begins during employment or during the first four weeks of unemployment. For any disability which begins after the first four weeks of unemployment but within the first 26 weeks of unemployment, coverage is provided by the Special Fund for Disability Benefits, which fund is financed by periodic assessments on all insurance carriers. Essentially, D.B.L. Insurance is similar to group non-occupational disability insurance which provides benefits beginning with the 8th day of disability for a maximum period of 13 weeks with the following important differences.

1. Day of disability is defined as, "any day on which the employee was prevented from performing work because of disability and *for which he has not received his regular remuneration.*"<sup>4</sup> (emphasis supplied) Thus an employee is not considered disabled if he receives his full salary and, therefore, does not

<sup>1</sup>M. J. Schwartz "New York Statutory Disability Benefits Law, Coverage, Rates and Rating Plans." Proceedings Casualty Actuarial Society, Vol. XXXVII, Pg. 57 (1950).

<sup>2</sup>See Tables I, II and III attached.

<sup>3</sup>Article 9 of the Workmen's Compensation Law.

<sup>4</sup>Workmen's Compensation Law, Section 201, Subdivision 13.

receive any disability benefits until the 8th day of disability for which he has received no wages, while in group insurance, disability begins on the day he is unable to work even though he is on paid sick leave.

2. Benefits are payable for a maximum period of 13 weeks for any disability or during any 52 consecutive calendar weeks, while in group insurance, benefits are payable for a maximum period of 13 weeks for any disability.
3. Coverage is provided by the carrier directly for the first four weeks of unemployment, and indirectly for the next 22 weeks of unemployment at no additional premium, while in group insurance, no coverage is provided for any period for which a premium is not paid.

Substantially Statutory Coverage is defined as coverage under which benefits are payable (1) after a waiting period of 7 days, (2) for a maximum of 13 weeks, (3) at a maximum weekly rate which is the same as the maximum rate for Statutory Coverage, (4) in the amount of 50% of earnings or in accordance with a salary levels schedule approximating thereto, and (5) excluding benefits in maternity cases.

Plan Coverage is all other coverage which meets the statutory requirements. A plan to qualify must provide benefits which are actuarially equal to or more favorable than Statutory Coverage. Plans are evaluated based on tables promulgated by the Workmen's Compensation Board.

Table I shows an analysis of the combined experience for Precisely Statutory, plus Substantially Statutory Coverage. Table II shows the experience for Precisely Statutory Coverage only, and Table III shows the experience for Substantially Statutory Coverage. The experience under Plan Coverage is not shown because it includes differing waiting periods, maximum amounts and durations, and therefore these statistics are of no value in analyzing the experience.

In order to properly evaluate the experience under Precisely Statutory and Substantially Statutory Coverage, it should be noted that the Law has been amended twice increasing the maximum rate of weekly benefits. In 1950 Statutory Coverage provided benefits at a maximum rate of \$26.00 a week. Effective April 1, 1952, the maximum benefit rate was increased to \$30.00 a week, and effective July 1, 1954, the maximum was increased to \$33.00 a week.

TABLE I

- (1) Average number of employees covered was arrived at by averaging the number of employees covered during the payroll period nearest the 15th of the second calendar month of each calendar quarter.

- (2) Covered payroll is defined as the first \$3,000 of earnings of each employee during the calendar year.
- (3) The number of weekly claims allowed includes all claims originally allowed during the calendar year, regardless of the date of disability.
- (5) It should be noted that the losses are shown on a paid basis. The incurred figures are not available.
- (7) The increase in the average weekly rate of benefits paid from 1951 to 1954 is due to the increase of the statutory maximum benefit rate. The increase in the average weekly benefit rate is also due to wage increases due to inflation.
- (9)&(10) The increases from 1951 to 1953 are due to the same factors shown under (7). The decreases from 1953 to 1954 might be due to the shifting of some of the high salary groups from Statutory to Plan Coverage or to self insurance. This assumption is supported by the 5% drop in the number of covered employees for Statutory Coverages.
- (12) The increase in the average annual covered payroll is probably due to wage increases due to inflation.

#### TABLE II and III

These tables show separately the tabulations for Statutory and for Substantially Statutory Coverage.

Substantially Statutory Coverage provides somewhat broader coverage than Statutory Coverage because some of the exclusions and limitations contained in the Law are omitted, and therefore the claim costs per unit of coverage are somewhat higher than the claim costs for Statutory Coverage.

#### *Annual Claim Cost—Males*

The claim costs shown in the attached tables are not broken down by sex since this information is not available separately. However, an all male rate might be derived by using the following assumptions:

1. Mr. Rowell found<sup>5</sup> that for group accident and sickness coverage beginning with the 8th day of disability for a maximum period of 13 weeks the morbidity for women is about 1.75 of the morbidity for men. The unpublished D.B.L. experience of a large carrier, which is on file in this Department, shows that the morbidity for women is 1.7 of the morbidity for men.

<sup>5</sup>J. H. Rowell Written Discussion of "N. Y. Statutory Disability Benefits Law, Coverage, Rates and Rating Plans." Proceedings of the Casualty Actuarial Society, Vol. XXXVIII, Pg. 79 (1951).

2. The covered payroll for women is estimated at 22% of the total covered payroll.<sup>6</sup>

Based on the assumptions that the average female exposure was 22% and the morbidity for women is 1.7 of the morbidity for men, the average rate would be 115%<sup>7</sup> of the male rate. The average claim cost per \$1.00 of weekly benefits exposed for the years 1951-1954 was \$.326. Therefore, the average annual claim cost for males per \$1.00 of weekly benefits exposed was  $\frac{$.326}{1.15} = \$.284$

### *Comparison of Group Experience with D.B.L. Experience*

When D.B.L. rates were developed in 1950, all rates were based on the Inter-company Morbidity Studies published by the Society of Actuaries.<sup>8</sup> The 1947-49 Inter-company Morbidity Study<sup>9</sup> shows that the net cost for male lives of non-occupational weekly indemnity coverage beginning with the 8th day of disability for a maximum period of 13 weeks to be \$.48 per year per \$1.00 of weekly benefits exposed. This net cost figure is also confirmed by subsequent inter-company morbidity studies. For Statutory D.B.L. Coverage, the net cost per year for males was \$.284.<sup>10</sup> Thus, the D. B. L. experience shows that the cost for Statutory Coverage is approximately 60% of the cost of the 8th day, 13 weeks plan. A number of reasons have been advanced for the sharp difference between the D.B.L. experience and group experience. Among them are the following:

1. The difference in definition of "day of disability".  
(See discussion above under "Precisely Statutory Coverage".)
2. Prior to 1950 many of the large employers provided group weekly indemnity insurance for their employees. Very few employers of smaller groups provided such insurance and no groups of less than 25 lives were insured under group coverage since the N. Y. Insurance Law<sup>11</sup> defined a group as not less than 25 employees. In 1949 the Insurance Law was amended to define a group as two or more employees. D.B.L. coverage is written on groups of four or more employees. It is reasonable to assume that many of the employers, particularly small employers, who had not previously provided group insurance for

<sup>6</sup>This figure is based on State Labor Department figures (not published).

<sup>7</sup> $.22 \times 1.70 = .374$

$.78 \times 1.00 = .780$

$\frac{.374}{1.15}$

<sup>8</sup>For reference see footnote 1 supra.

<sup>9</sup>M. D. Miller, "Group Weekly Indemnity Continuation Table Study", Transactions, Society of Actuaries, Vol. III (1951) Eastern Spring Number.

<sup>10</sup>See above under "Annual Claim Cost — Males".

<sup>11</sup>Section 221.

their employees, purchased Precisely Statutory Coverage when required by law. Thus, much of the experience reported under Statutory Coverage is experience for small groups, since many of the larger groups are insured for Plan Coverage. There are some indications that the morbidity for small groups is more favorable than the morbidity on larger groups. Fitzhugh<sup>12</sup> found that for 8th day, 13 weeks coverage, the morbidity on groups of less than 50 lives was 92.7% of the morbidity for groups of all sizes. The experience of a large carrier for the policy year 1946-47 shows the following loss ratios by size of the insured group for group weekly indemnity insurance:<sup>13</sup>

<i>Annual Premium</i>	<i>Ratio of Claims Payments to Premiums</i>
Less than \$500.00	42%
\$ 10,000-\$ 20,000	63%
\$100,000-\$250,000	68%

It is, therefore, likely that one of the reasons for the more favorable experience for Precisely Statutory Coverage is that that group includes a large number of small groups.

3. In group insurance generally a minimum participation of 75% of the employees is required. As a result, some of the young healthy employees may not elect to participate. D.B.L. insurance is compulsory insurance and, therefore, required 100% participation.
4. In group insurance, an 8th day, 13 weeks plan generally pays for a maximum period of 13 weeks for any one disability. Statutory D.B.L. coverage limits the benefits to a maximum of 13 weeks in any 52 calendar weeks. Under a group policy, an employee who is disabled more than once in any year might be paid benefits for more than 13 weeks.

**WORKMEN'S COMPENSATION BOARD ASSESSMENT FOR ADMINISTRATION**

The law is administered by the Workmen's Compensation Board. After April 1 of each year, an assessment is levied by the Board to

<sup>12</sup>G. W. Fitzhugh "Recent Morbidity upon Lives Insured Under Group Accident and Health Policies and Premiums Based Thereon". Transactions of the Actuarial Society of America, Vol. XXXVIII, Pg. 374, Part II.

<sup>13</sup>"Studies in Disability Insurance" State of N. Y. Department of Labor Special Bulletin No. 224 (1949) Pg. 115. These figures are quoted in the "Studies in Disability Insurance" to show that smaller groups experience a lower claim rate than larger groups (see Pg. 82, Studies in Disability Insurance). We must, therefore, assume that the claim rates are related to the same basic premium rates; otherwise, the quoted figures would be meaningless.

reimburse it for the expenses for the previous fiscal year (April 1-March 31). The assessment is levied on all the covered payrolls for the previous calendar year. This assessment was approximately .01 of 1% of covered payrolls for each of the past three years.

#### RESERVE FOR ASSESSMENTS FOR THE SPECIAL FUND FOR DISABILITY BENEFITS

D.B.L. coverage for workers who are unemployed more than four weeks but less than 26 weeks is provided by the "Special Fund", which fund is administered by the Workmen's Compensation Board. This fund was established in 1950 by levying an assessment of .2 of 1% on all payrolls (maximum assessment \$.12 per week per employee) for the first six months of 1950. This assessment was expected to raise twelve million dollars. The law<sup>14</sup> provides that whenever on April 1 of any year the net assets of the Fund shall be one million dollars below either (1) the sum of twelve million dollars or (2) twice the sum of benefits paid during the preceding fiscal year, whichever is the greater, the Chairman of the Workmen's Compensation Board shall assess and collect from all carriers an amount sufficient to restore the Fund to an amount equal to twelve million dollars or twice the sum of benefits paid during the preceding fiscal year, whichever is the greater. In 1951 an assessment at the rate of approximately .05 of 1% was levied to restore the fund to the required \$12,000,000. Because of the low unemployment rate and consequent low disbursements from the Fund, and because of interest earnings of the fund, the net assets did not fall below \$11,000,000 until April 1, 1955, and therefore no assessment was levied until May, 1955. In May, 1955 an assessment was levied at the rate of approximately .01165 of 1% of covered payrolls.

It is expected that in a depression year, the assessment to restore the Special Fund for Disability Benefits to the required minimum will be very large since the required minimum is twice the amount paid to the sick unemployed if the amount paid out in the previous calendar year is over \$6 million. The assessment will be levied on shrunken payrolls. This would result in sharp increases in D.B.L. premium rates making a bad economic situation worse. It might also deplete the surplus funds of some insurance companies. For these reasons, the Insurance Department requires companies to set up in prosperous times a reserve for assessments for the sick unemployed in amounts considerably higher than the assessment anticipated the next year. Thus, when assessments are substantially higher than average, the difference would be taken from this reserve instead of increasing the premium rate or depleting the surplus funds.

The rationale of the Department for requiring reserves higher than the anticipated assessment for the current year was stated in 1952

<sup>14</sup>Workmen's Compensation Law, Section 214, Subdivision 2.

by the then Deputy Superintendent J. F. Murphy in the following words:<sup>15</sup>

"The following factors were considered in arriving at the reserve liabilities set out herein.

1. Current favorable employment rates may not continue indefinitely and wide fluctuations in the number of persons employed are possible and are often sudden.
2. The reserve should make advance provision for unusual losses in any one year so as to permit annual premium charges to be equalized.
3. In the event of widespread unemployment the assessment under the law is indeterminate and the fixing of a reserve to meet such a liability is a matter requiring conservative judgment.
4. The reserves for 1953 and succeeding years should not be fixed so as to accumulate an excessive amount."

The reserve requirements of the Department for the years 1950 to 1953 were as follows:<sup>16</sup>

Dec. 31, 1950		.1 of 1% of Covered Payrolls of the Second Half of 1950.
Dec. 31, 1951	Reserves set up as of Dec. 31, 1950, plus	.1 of 1% of Covered Payrolls for 1951, minus Assessments paid in 1951.
Dec. 31, 1952	Reserves set up as of Dec. 31, 1951, plus	.08 of 1% of Covered Payrolls for 1952.
Dec. 31, 1953	Reserves set up as of Dec. 31, 1952, plus	.05 of 1% of Covered Payrolls for 1953.

At the end of 1953, insurers under the supervision of the Department, held reserves for the assessment for the Special Fund approximating .24% of the 1953 Covered Payroll. Up to this time the Department has made no finding as to how much reserve should be required in the aggregate or how this requirement should be geared to current writings. In a circular letter dated June 3, 1954, the then Deputy Superintendent J. F. Murphy stated that in the opinion of the Department the aggregate reserve as of December 31, 1953 is adequate and reasonable and that barring unforeseen developments no further substantial accumulation is required. In the same letter

<sup>15</sup>See Department circular letter dated May 16, 1952.

<sup>16</sup>See Department circular letters dated April 12, 1950, May 16, 1952, and May 7, 1953.

the reserve requirements for December 31, 1954 and for subsequent years were established as follows:

"The required reserve to be reported in the annual statement by each insurer on December 31, 1954 and on December 31 of subsequent years shall be determined by either (a), (b), or (c), *whichever is the lowest*:

- (a) .08 of 1% of covered payrolls for the year of report and the two immediately preceding years.
- (b) Reserve established on December 31 of year preceding year of report plus .05 of 1% of covered payrolls of year of report.
- (c) .30 of 1% of covered payrolls of year of report.

In the case of insurers which have operated continuously since the enactment of the law, the general effect of (a) is to establish a ceiling for the required reserve while (b) and (c) are principally necessary to take care of insurers more recently entering the D.B.L. field or where the volume of D.B.L. business in the year of report has declined."

As to provision in D.B.L. rates for these reserves, the letter also states, that:

"Provision in D.B.L. rates for the subject reserve requirements or the refund of any such amounts heretofore charged are a matter of contract between an insurer and insured subject to applicable provisions of the Insurance Law."

## CONCLUSION

Because aggregate figures only are available to the author, the reasons advanced for the difference between group and D.B.L. experience cannot be documented. It is hoped that this paper will have full discussion and critical review and that members of the Society will furnish experience to confirm or refute some of the assumptions made.

TABLE I

D.B.L. EXPERIENCE FOR THE CALENDAR YEARS 1951 - 1954  
 COMBINED EXPERIENCE PRECISELY STATUTORY PLUS SUBSTANTIALLY STATUTORY COVERAGE

	1951	1952	1953	1954	1951 - 1954
(1) Average Number of Employees Covered	2,331,137	2,290,736	2,313,872	2,218,484	9,154,229
(2) Amount of Covered Payroll	\$5,466,683,536	\$5,782,306,816	\$5,929,364,381	\$5,717,179,363	\$22,895,534,096
(3) Number of Initial Claims Allowed	134,439	134,568	137,540	124,613	531,160
(4) Total Number of Weeks Paid	718,734	749,964	784,917	728,885	2,982,500
(5) Losses Paid	\$ 15,773,958	\$ 17,542,416	\$ 19,136,879	\$ 17,994,930	\$ 70,448,183
(6) Annual Claim Frequency per 100 Covered Employees (3)/(1)×100	5.8	5.9	5.9	5.6	5.8
(7) Average Weekly Rate of Benefits Paid (5)/(4)	\$ 21.95	\$ 23.39	\$ 24.38	\$ 24.69	\$ 23.62
(8) Average Disability Period (in weeks) Compensated per Claim (4)/(3)	5.35	5.57	5.71	5.85	5.62
(9) Annual Claim Cost per Employee Insured (5)/(1)	\$ 6.77	\$ 7.66	\$ 8.27	\$ 8.11	\$ 7.70
(10) Annual Claim Cost as % of Covered Payroll (5)/(2)	.29%	.30%	.32%	.31%	.31%
(11) Annual Claim Cost per \$1.00 of Weekly Benefits Exposed (4)/(1)×\$1.00	\$ .308	\$ .327	\$ .339	\$ .329	\$ .326
(12) Average Annual Covered Payroll per Employee (2)/(1)	\$ 2,345	\$ 2,524	\$ 2,563	\$ 2,577	\$ 2,501
(13) Average Cost per Claim (5)/(3)	\$ 117.33	\$ 130.36	\$ 139.14	\$ 144.41	\$ 132.63

TABLE II

D.B.L. EXPERIENCE FOR THE CALENDAR YEARS 1951 - 1954  
PRECISELY STATUTORY COVERAGE

	1951	1952	1953	1954	1951 - 1954
(1) Average Number of Employees Covered	1,610,685	1,601,026	1,626,568	1,596,615	6,434,894
(2) Amount of Covered Payroll	\$3,738,795,900	\$3,967,710,537	\$4,187,311,960	\$4,119,586,165	\$16,013,404,562
(3) Number of Initial Claims Allowed	86,477	86,532	92,590	87,997	353,596
(4) Total Number of Weeks Paid	476,847	491,952	531,939	520,938	2,021,676
(5) Losses Paid	\$ 10,347,110	\$ 11,331,304	\$ 12,898,804	\$ 12,810,523	\$ 47,387,741
(6) Annual Claim Frequency per 100 Covered Employees (3)/(1)×100	5.4	5.4	5.7	5.5	5.5
(7) Average Weekly Rate of Benefits Paid (5)/(4)	\$ 21.70	\$ 23.03	\$ 24.25	\$ 24.59	\$ 23.44
(8) Average Disability Period (in weeks) Compensated per Claim (4)/(3)	5.51	5.69	5.75	5.92	5.72
(9) Annual Claim Cost per Employee Insured (5)/(1)	\$ 6.42	\$ 7.08	\$ 7.93	\$ 8.02	\$ 7.36
(10) Annual Claim Cost as % of Covered Payroll (5)/(2)	.28%	.29%	.31%	.31%	.30%
(11) Annual Claim Cost per \$1.00 of Weekly Benefits Exposed (4)/(1)×\$1.00	\$ .296	\$ .307	\$ .327	\$ .326	\$ .314
(12) Average Annual Covered Payroll per Employee (2)/(1)	\$ 2,321	\$ 2,478	\$ 2,574	\$ 2,580	\$ 2,489
(13) Average Cost per Claim (5)/(3)	\$ 119.65	\$ 130.95	\$ 139.31	\$ 145.58	\$ 134.02

TABLE III  
 D.B.L. EXPERIENCE FOR THE CALENDAR YEARS 1951-1954  
 SUBSTANTIALLY STATUTORY COVERAGE

	1951	1952	1953	1954	1951 - 1954
(1) Average Number of Employees Covered	720,452	689,710	687,304	621,869	2,719,335
(2) Amount of Covered Payroll	\$1,727,887,636	\$1,814,596,279	\$1,742,052,421	\$1,597,593,198	\$6,882,129,534
(3) Number of Initial Claims Allowed	47,962	48,036	44,950	36,616	177,564
(4) Total Number of Weeks Paid	241,887	258,012	252,978	207,947	960,824
(5) Losses Paid	\$ 5,426,848	\$ 6,211,112	\$ 6,238,075	\$ 5,184,407	\$ 23,060,442
(6) Annual Claim Frequency per 100 Covered Employees (3)/(1)×100	6.7	7.0	6.5	5.9	6.5
(7) Average Weekly Rate of Benefits Paid (5)/(4)	\$ 22.44	\$ 24.07	\$ 24.66	\$ 24.93	\$ 24.00
(8) Average Disability Period (in weeks) Compensated per Claim (4)/(3)	5.04	5.37	5.63	5.68	5.41
(9) Annual Claim Cost per Employee Insured (5)/(1)	\$ 7.53	\$ 9.01	\$ 9.08	\$ 8.34	\$ 8.48
(10) Annual Claim Cost as % of Covered Payroll (5)/(2)	.31%	.34%	.36%	.32%	.34%
(11) Annual Claim Cost per \$1.00 of Weekly Benefits Exposed (4)/(1)×\$1.00	\$ .336	\$ .374	\$ .368	\$ .334	\$ .353
(12) Average Annual Covered Payroll per Employee (2)/(1)	\$ 2,398	\$ 2,631	\$ 2,535	\$ 2,569	\$ 2,531
(13) Average Cost per Claim (5)/(3)	\$ 113.15	\$ 129.30	\$ 138.78	\$ 141.60	\$ 129.87