



All-Inclusive Coverage of Occupational Diseases under the New York Workmen's Compensation Law

INTRODUCTION

All workmen's compensation laws in principle allow the payment of compensation in case of disease which arises accidentally out of and in the course of employment. Other specifically occupational diseases, some of which are of gradual onset, are brought within the scope of compensation by one of three methods:

- (1) The double-column schedule, showing the disease and the process in which it is contracted.
- (2) The single-column schedule, showing either (a) the disease, or (b) the substances whose production or use may cause unspecified disease.
- (3) "All-inclusive-coverage", whereby any disease is compensable if it arises out of the employment.

Some laws provide for more than one method. The method most frequently used is that of the double-column schedule. The only diseases which are compensable under this method are those in respect of which two conditions are satisfied: (1) that the disease is mentioned in the schedule; (2) that the workman was employed in the process shown in the schedule opposite the disease. The disease is presumed to have been contracted in the process unless the employer (or insurer) proves the contrary.

In most countries where the double-column schedule is in use, when the scheduled disease is present but the workman was not employed in the process shown in the schedule opposite the disease, the onus of proof that the disease is due to the nature of his employment rests on the worker.

The single-column schedule of diseases only is used in some countries (New Zealand, Argentina, Norway) where the workman must prove that the disease was due to his employment. The single-column schedule of toxic substances is used in Switzerland, and again the onus of proof that the disease arose from contact with the substances rests on the worker.

Provision is made for the all-inclusive coverage of disease due to employment, in New South Wales, eight of the States of the U.S.A., Spain, and several Latin American countries, by simply omitting

the reference to "accident" in the definition of the risk covered by the workmen's compensation law. The absence of any general scheme of compulsory sickness insurance is certainly a factor which has favoured the introduction of such provision in those countries.

In New South Wales, for example, the risk is defined as "personal injury arising out of and in the course of employment", including "a disease so arising whether of sudden onset or of such a nature as to be contracted by gradual process". Reference to the compensation statistics of this State shows that the causes of disease, after ten years' application of this definition, represent less than one per cent. of the total number of cases compensated (lead poisoning among miners and silicosis among stone workers are covered by special legislation).

The absence of compulsory sickness insurance will, of course, act as an incentive for the worker to ascribe any disease to his present or past professional activity. *A priori*, therefore, the extension of the coverage to any disease not enumerated in a schedule may lead to some unexpected and costly results.

It is therefore of interest to examine the working of one of the existing schemes of general coverage in a large industrial (though not mining) State, like that of New York, where a provision to cover "any and all occupational diseases" was introduced in 1935.

THE NEW YORK SYSTEM OF COVERAGE

The New York Workmen's Compensation Law includes a double-column list of 27 occupational diseases (section 3, subdivision 2, paragraphs 1-27). If the employee was employed in any process mentioned in the second column of the schedule of diseases and his disease is the disease in the first column of such schedule set opposite the description of the process, the disease is presumptively deemed to have been due to the nature of that employment and the worker is entitled to compensation.

In 1935, as from 1 September, a new paragraph, 28, was added to the schedule, to the effect that "any and all occupational diseases" shall be compensated if due to the nature of "any and all employments" within the scope of the Law. The State Insurance Fund has met the problem of the increased insurance cost due to enactment of this paragraph 28 by offering group plans of insurance on a non-profit basis, with return of any savings to the insured employers.

The provisions with regard to occupational and other diseases in force at present can be summarised as follows:

"Disability or death resulting from any of 27 occupational diseases listed in a schedule or from any and all occupational diseases", if due to the nature of an employment specified, and if contracted therein (subject to exception) within 12 months previous to date of disablement is to be treated and compensated as an accidental injury, subject to special conditions, including provision for apportionment where the disease is contracted under several employers; requiring certain information to be given by employee to employer; requiring notice within 90 days after disablement; and establishing a presumption, in certain circum-

stances, that the disease was due to the nature of the employment. Special provisions apply only to silicosis and other dust diseases.¹

The definition of occupational disease in its broader sense was stated as follows (in 1938):

An occupational disease is one which results from the nature of the employment, and by nature is meant, not those conditions brought about by the failure of the employer to furnish a safe place to work, but conditions to which all employees of a class are subject, and which produce the disease as a natural incident of a particular occupation, and attach to that occupation a hazard which distinguishes it from the usual run of occupations and is in excess of the hazard attending employment in general.²

Where a disability is the result of a single exposure to an injurious substance, it is compensated as an accident. The injuries in this group are usually chemical burns, skin irritations, or poisoning. When a disability results from exposure to a harmful substance or occupational activity over a period of time in employment, it is compensated as an occupational disease. These diseases include poisoning, dermatitis, and a variety of other conditions arising from the use of injurious substances in various trades and industries, given exposure to unusual physical conditions, such as excessive degrees of heat, prolonged dampness, compressed air, etc., and from occupational activity, such as continuous rubbing or continued strain in one position or repeated performance of a machine operation. It is often difficult to determine whether a given condition is the result of a single exposure or of a series of contacts over a period of time.³ This is particularly true of skin irritations, such as dermatitis, and accounts for the fact that similar disabilities are found under both headings, "accidental injuries" and "occupational diseases". In 1937, for example, 106 cases of blisters and abrasions from continued wear in handling and 319 injuries due to the position in which the employee had to work were compensated as accidents rather than occupational diseases. Both groups should therefore be considered in this study. In fact, it has been stated that "it is probably safe to assume that much of the increase in occupational diseases is the result of a change in classification" and that "many cases were classified as occupational diseases in 1937 which would formerly probably have been compensated as accidents".³

STATISTICS OF WORKING

Number of Cases

Statistics of cases closed during the years 1935-1940 show that the increase in the number of cases compensated as occupational diseases was continuous since 1935. The increase was important

¹ ASSOCIATION OF CASUALTY AND SURETY EXECUTIVES: *Digest of Workmen's Compensation Laws of the United States and Territories* (New York, N.Y.), pp. 30-31.

² *Ibid.*

³ Cf. NEW YORK DEPARTMENT OF LABOR: *The Industrial Bulletin* (Albany, N.Y.), Vol. 18, 1939, pp. 68-71, 347, 351; Vol. 20, 1941, pp. 167-168.

during the two years following the extension of coverage of the compensation law to any and all occupational diseases, reaching about 42 per cent. from 1935 to 1936 and nearly 44 per cent. from 1936 to 1937. The increase was much slower during the three following years (about 2 per cent. from 1937 to 1938, 6 per cent. from 1938 to 1939, but nearly 17 per cent. from 1939 to 1940).

The number of accidental injuries due to harmful substances rose about 8 per cent. from 1935 to 1936 and less than 5 per cent. from 1936 to 1937, and decreased during the two following years (table I). In 1937, as stated above, many cases were classified as occupational diseases which formerly would probably have been compensated as accidental injuries. This is shown by the fact that similar disabilities are found in the two groups (*i.e.* dermatitis, carbon monoxide poisoning, etc.).

Though the total number of compensated cases (injuries and diseases) due to harmful substances and activity increased by about 24 per cent. from 1935 to 1936 and by 25 per cent. from 1936 to 1937 and has been rising since, it is of interest to note that this number is only a small proportion of the aggregate compensated cases from all causes. It represented an average of less than 3 per cent. of the cases from all causes for the period 1935-1939, ranging from 2.2 per cent. in 1935 to 3.2 per cent. in 1939.

TABLE I. INCREASE IN NUMBER OF COMPENSATED CASES DUE TO HARMFUL SUBSTANCES AND ACTIVITY IN NEW YORK STATE 1935-1939

Year	No. of cases from all causes	All cases due to harmful substances			
		% of cases from all causes	Total no.	Accidental injuries	Occupational diseases
1935-1939 average	76,477	2.8	2,104	893	1,211
1935.....	70,769	2.2	1,523	829	694
1936					
Number.....	75,458	2.5	1,882	898	984
Incr. (+)%.....	+6.6		+23.5	+8.3	+41.8
1937					
Number.....	80,929	2.9	2,353	939	1,414
Incr. (+)%.....	+7.3		+25.0	+4.6	+43.7
1938					
Number.....	78,870	3.0	2,366	925	1,441
Incr. (+) or decr. (-)%	-2.6		+0.4	-1.5	+1.9
1939					
Number.....	77,357	3.2	2,396	874	1,522
Incr. (+) or decr. (-)%	-1.9		+1.3	-5.5	+5.6
1940					
Number.....	—	—	2,747	972	1,775
Incr. (+)%.....	—	—	+14.6	+11.1	+16.6

The number of cases compensated under the all-inclusive paragraph 28 from 1937 to 1940 amounted to about 14 per cent. of the total of disabilities caused by occupational diseases (paragraphs 1-28) and about 9 per cent. of all cases (injuries and diseases) due to harmful substances and activity compensated during these four years (table IIa).

Cost of Compensation

The total compensation cost of disabilities caused by harmful substances and activity rose from \$682,913 in 1937 to \$859,342 in 1940 (table IIB). This increase is entirely due to compensation under paragraph 28, which represented 4.8 per cent. in 1937, 15.5 in 1938, 19.8 in 1939, and reached 27.4 per cent. of total compensation cost in 1940. It should be noted, however, that the increase of cost of compensation under paragraph 28 during the last three years is partly due to a high number of deaths and permanent disabilities caused by silicosis and dust diseases.

TABLE II. NUMBER AND COST OF COMPENSATED CASES DUE TO HARMFUL SUBSTANCES AND ACTIVITY IN NEW YORK STATE, 1937-1940

Disability	1937	1938	1939	1940
(a) Total number of cases				
All cases due to harmful substances.....	2,353	2,366	2,396	2,747
Accidental injuries.....	939	925	874	972
Occupational diseases.....	1,414	1,441	1,522	1,775
Any and all occupational diseases (para. 28).....	150	195	236	295
Silicosis and dust diseases.....	13	45	38	64
All other.....	137	150	198	231
(b) Total compensation				
	\$	\$	\$	\$
All cases due to harmful substances.....	682,913	747,791	785,734	859,342
Accidental injuries.....	333,415	253,842	269,909	257,730
Occupational diseases.....	349,498	493,949	515,825	601,612
Any and all occupational diseases (para. 28).....	33,129	116,054	155,636	235,491
Silicosis and dust diseases.....	9,503	55,674	67,938	133,423
All other.....	23,626	60,380	87,698	102,068
(c) Average compensation per case				
	\$	\$	\$	\$
All cases due to harmful substances.....	290	316	328	313
Accidental injuries.....	355	274	309	265
Occupational diseases.....	247	343	339	339
Any and all occupational diseases (para. 28).....	221	595	659	798
Silicosis and dust diseases.....	731	1,237	1,788	2,085
All other.....	172	403	443	442

The average cost per case of all occupational diseases—table II (c)—increased in 1938 over the preceding year, but did not vary much during the years 1938 to 1940. In 1940 the average compensation for accidental injuries (\$265 per case) and for occupational diseases (\$339 per case) were stated to be below the average compensation for all cases other than those due to harmful substances.

Kinds of Disabilities

In the study of various kinds of disabilities compensated under the all-inclusive paragraph 28, it is, in the first instance, of interest to consider the disputed claims awarded as a result of legal action during the first few years following the introduction of the paragraph. The following claims submitted to the State Industrial Board, which administers workmen's compensation, were finally awarded by the New York courts from 1938 to 1941 under this paragraph:

- Hernia from twisting and straining body, hernia from lifting;
- Bell's palsy (facial paralysis) due to exposure to cold air;
- Traumatic arthritis of wrist;
- Dupuytren's contracture from operation of marble polishing machine;
- Dupuytren's contracture of both hands;
- Monoxide poisoning from testing automobile motors;
- Inhalation of carbon tetrachloride fumes;
- Patellar abscess and lymphangitis from use of mop wringer;
- Infection from friction of shoe, dancing instructress;
- Bronchiectasis and bronchial asthma from use of lacquer-nitroglycerine spray;
- Bronchitis complicated by asthma from dust, dampness, and fumes;
- Scarlet fever, nurse;
- Pneumonia from working in refrigerator, pneumonia from temperature changes;
- Tuberculosis from exposure to gas and fumes, tuberculosis contracted by hospital interne, tuberculosis by truck washer.

The following three claims in connection with tuberculosis are of interest in view of their potential importance: tuberculosis from going in and out of refrigerator, remanded for additional evidence; tuberculosis contracted by student nurse, remitted for further hearing; a case of tuberculosis in a clothes presser, remitted for further proof.

No detailed information is available with regard to all cases compensated under paragraph 28 as included in table II. In 1937 the 150 cases classified as "any and all occupational diseases" (table IIa) were distributed as follows: dermatitis 30, blisters and abrasions 7, bursitis and synovitis 43, silicosis 13, and a group of 57 cases including dust diseases, contagious and infectious diseases contracted in employment, conjunctivitis and other eye injuries from injurious materials, etc. Two cases of dermatitis are of special interest, namely: a non-schedule case of permanent partial disability with an award of over \$6,000 to a concrete worker for susceptibility to eczematous dermatitis when exposed to minerals and oils, and a case of a foreman in a wallpaper manufacturing plant, who developed a permanent turpentine sensitivity and received an award for permanent partially reduced earning capacity. Compensation was also awarded for a number of temporary cases of bronchitis, laryngitis, sinus and lung conditions, etc., from inhaling dust and other materials, among them: feather dust, wool dust, lint, powders, coal dust, clay dust, wall plastic dust, powdered

salt, fumes and air in an ill-ventilated subway station. Nine cases of conjunctivitis or other eye disabilities were caused by continuous welding, continuous exposure to electric flashes, dust, dirt, and fumes. Nineteen cases, including one fatal case, were caused by contagious or infectious diseases contracted at work. The worker in most cases was a nurse or hospital attendant who came in contact with patients having such diseases as typhoid, scarlet fever, mumps, erysipelas, tuberculosis, or throat infection. In one case an automobile mechanic contracted grippe and bronchitis from over-exposure due to working all night on a highway repairing a truck.

In 1940, the 231 cases, other than dust diseases, compensated under paragraph 28 included a similar variety of conditions. The most important group of cases consisted of infectious and contagious diseases, of which the largest number were cases of tuberculosis contracted by nurses and attendants in hospitals. Other diseases similarly contracted were scarlet fever, mumps, measles, diphtheria, bronchitis and other throat infections. Non-infectious occupational diseases consisted chiefly of hernias, but included also such conditions as eye strain, conjunctivitis, phlebitis, arthritis, and rheumatic fever. This classification included also a large number of skin irritations, blisters or abrasions, and bursitis or synovitis.

Special provisions applying to silicosis and other dust diseases were included in the Workmen's Compensation Law in June 1936 (Article 4A). One of the provisions limiting compensation for total disability or death to \$5,000 will become effective in January 1944. Deaths and total disabilities occurring before that date are compensated with a maximum of \$500 beginning in June 1936, and this upper limit is increased by \$50 each month until December 1943. This accounts, in part, for the continuous rise in compensation cost and average cost per case of silicosis and other dust diseases compensated under paragraph 28 from 1937 to 1940 (table III).¹ A further increase is to be expected in this group during the years 1941 to 1943.

In 1940 the compensation cost for 64 cases of silicosis and other dust diseases reached about 57 per cent. of the total compensation cost under paragraph 28. The silicosis cases, which made up the larger portion of these cases, were the most costly, averaging nearly \$2,220 per case. The lung diseases from inhaling other than silica dust, chiefly dust in handling furs and flour, were less costly, but averaged nearly \$1,800 a case.

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The number and compensation cost of all disabilities due to harmful substances and activity has increased during the years following the introduction of an all-inclusive paragraph in the double-column schedule of compensation for occupational diseases in 1935. The number of cases compensated in this group represents, however, less than 3 per cent. of compensated cases from all causes (1936 to 1939), and the average cost per case is likewise smaller.

A large proportion of the cost of compensation under the new paragraph is due, since 1938, to the high cost of deaths and permanent disability caused by silicosis and other dust diseases.

¹ The 160 cases of silicosis and other dust diseases compensated from 1937 to 1940 included 43 deaths and 35 permanent total disabilities.

TABLE III. NUMBER AND COST OF COMPENSATED DISABILITIES DUE TO HARMFUL SUBSTANCES AND ACTIVITY IN NEW YORK STATE

Cases closed during the four years 1937-1940

Kind of substance or disease	Total number of cases	Total number of weeks	Total amount of compensation
			\$
All disabilities from harmful substances....	9,862	355,721	3,075,780
All accidental injuries due to harmful substances.....	3,710	111,098	1,114,896
Due to poisonous substances.....	1,078	72,291	540,254
Carbon monoxide and dioxide.....	148	29,552	187,615
Poison ivy and other plants.....	469	1,005	11,998
Illuminating gas.....	54	10,684	83,509
Hydrocyanic acid and cyanide gases and fumes.....	5	1,380	12,627
Carbon bisulphide.....	2	12	97
Septic infection.....	45	1,005	14,414
Other and undefined.....	355	28,653	229,994
Due to corrosive substances.....	2,560	38,409	569,890
Lime.....	876	12,919	222,996
Cement.....	257	2,242	35,083
Acids.....	509	9,378	107,896
Alkalis.....	384	8,120	117,495
Other chemicals.....	534	5,750	86,420
Due to irritant but not corrosive substances.....	72	398	4,752
All occupational diseases due to exposure to harmful substances or activity.....	6,152	244,263	1,960,884
Occupational poisoning and skin diseases (paras. 1 to 24).....	913	80,092	776,874
Anthrax (para. 1).....	30	3,585	16,653
Lead poisoning (para. 2).....	286	39,659	403,826
Zinc poisoning (para. 3).....	3	1,458	12,289
Mercury poisoning (para. 4).....	18	1,785	15,399
Phosphorus poisoning (para. 5).....	—	—	—
Arsenic poisoning (para. 6).....	4	1,001	7,023
Poisoning by wood alcohol (para. 7).....	7	1,033	2,125
Poisoning by benzol, etc. (para. 8).....	311	17,876	170,181
Poisoning by carbon bisulphide (para. 9).....	12	80	1,510
Poisoning by nitrous fumes (para. 10).....	2	2	44
Poisoning by nickel carbonyl (para. 11).....	7	18	223
Dope ¹ poisoning (para. 12).....	33	2,385	21,211
Poisoning by formaldehyde (para. 13).....	15	141	1,355
Chromic ulceration (para. 14).....	33	1,393	9,612
Ulceration from tar, pitch, etc. (para. 15).....	10	2,155	9,260
Glanders (para. 16).....	—	—	—
Compressed-air illness (para. 17).....	55	1,868	49,106
Miners' diseases (para. 18).....	—	—	—
Cataract in glassworkers (para. 19).....	—	—	—
Radium poisoning (para. 20).....	2	1,517	12,529
Methyl chloride poisoning (para. 21).....	2	9	176
Carbon monoxide poisoning (para. 22).....	45	2,577	32,022
Poisoning by sulphuric, hydrochloric, and hydrofluoric acid (para. 23).....	14	330	3,394
Disorders due to contact with petroleum products and their fumes (para. 24).....	24	1,220	8,936

¹ Tetrachlor-methane, solvent for acetate of cellulose, nitro-cellulose, etc.

TABLE III. (*cont.*)

Kind of substance or disease	Total number of cases	Total number of weeks	Total amount of compensation
			\$
Occupational diseases due to exposure to harmful substances or activity (<i>cont.</i>)			
Conditions due to harmful occupational activity (paras. 25, 26).....	1,496	11,009	145,139
Blisters or abrasions (para. 25).....	984	6,841	89,677
Bursitis or synovitis (para. 26).....	512	4,168	55,462
Dermatitis (venenata) (para. 27).....	2,867	41,485	498,561
Any and all occupational diseases (para. 28)	876	112,037	540,310
Silicosis and dust diseases.....	160	84,359	266,538
All other.....	716	27,678	273,772

The cases returned under "any and all occupational diseases" other than silicosis and dust diseases are due to a variety of disabilities, partly some non-schedule diseases and partly unusual occupational conditions.

An important group of disabilities compensated under paragraph 28 are due to contagious and infectious diseases, mostly among hospital nurses and attendants.