

WORK OF THE STATISTICAL COMMITTEE OF THE BUREAU
OF PERSONAL ACCIDENT AND HEALTH
UNDERWRITERS.

BY

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Before going into the work of the Committee a brief review of the development of the coverage under the personal accident insurance policy during the past ten or fifteen years and the condition of accident experience during that period is desirable. As you probably know, the personal accident policy ten or more years ago was a comparatively simple form which paid a certain amount in case of accidental death, say \$1,000, and in case of disability \$5 per week. To this coverage have been added from time to time various features generally called "frills" until today the policy is a bewildering array of special benefits and features—some of very little value, others very expensive and many entirely illogical and unnecessary. We have had the addition of the double indemnity feature, which doubles the payment in case the insured is injured in a particular manner as, for instance, upon a railway train, in an elevator or a burning building; the accumulation feature, which adds annually a percentage of the principal sum insured to the amount payable in case of death; the beneficiary feature, which amplifies the contract so that in case of accidental death of the beneficiary upon a railway train, in a burning building or in some other specified manner of accident the principal sum of the policy is payable; the indemnity provision for partial disability has been increased; hospital and surgical fees have been provided; the double indemnity feature has been extended to treble and quadruple indemnity; policyholders have been granted full accumulations from the date of issue of the contract; indemnity for life in case of permanent and total disability has been provided. These and many other more or less important additions have been made to the policy coverage oftentimes by companies which clearly were not in a position to know the probable cost of the features. Many have been added simply as "talking" points which, if a proper valuation of

the cost could have been made, would have been shown to be most unwise additions to the total cost of the policy.

While the policy coverage was being enlarged from year to year certain new and grave hazards were growing, as for example the automobile hazard and the increase in the hazard of travel. The serious effect upon the cost of the protection in the growth of these hazards is well illustrated by a condition referred to by Mr. B. A. Page, Vice President, The Travelers Insurance Company, in a paper upon the automobile hazard rate at the Second Convention of the International Association of Casualty and Surety Underwriters in 1912. Mr. Page says: "Ten years ago there was practically no such thing as an automobile accident. Last year, claims from select, preferred and ordinary class risks were increased by automobile accidents 28 per cent. and this does not take into account horse and vehicle accidents caused by automobiles, nor injuries to pedestrians and persons on bicycles, motorcycles, etc., who were run over or into by autos." Not only have these hazards been increasing but the accident companies have amplified the coverage of their contracts to risks exposed to these hazards.

In the meantime, rates for the preferred risks (the class to which these policies are offered) have not been increased. For certain of the benefits a small and generally inadequate extra charge has been made, but, generally speaking, no increase in rates has followed the material increase in coverage granted under the contracts.

Recognizing the seriousness of developments, company managers have at various times in the past endeavored to obtain co-operation among the companies with the idea of eliminating some or all of these "frills" and to give proper consideration to the increase in certain hazards. It has been felt by many in the business that the difficulty in coming to an agreement upon this matter has been due to the fact that conclusive statistical evidence as to the expensiveness of some of these features has been lacking. The point of this remark is seen more clearly when it is stated that but few of the companies writing this class of business have paid any attention whatever to the compilation of experience. It is a most remarkable fact that companies with comparatively large volumes of personal accident business have gone ahead in almost complete ignorance of some of the most essential information necessary in the business. The general result has been therefore, as stated before,

that year after year, although certain hazards were increasing, the policy coverage has been expanded by the addition of various novel and many times most expensive features without regard, apparently, to the cost—or without knowledge of the cost—solely with the idea of attracting business by going the competitor one better.

In the meantime, the loss ratios of many of the companies have shown clearly that the business has been conducted at a loss; in the case of many companies at a severe and increasing rate of loss. One of the first acts of the newly formed Bureau of Personal Accident and Health Underwriters, therefore, was to lay plans for the collection of statistical data which would throw light upon the cost of these features and also upon some of the developing hazards of the business with the hope that such experience information would impress upon all of the company managers the urgent necessity for reform. It felt that there was not only a probability that this desirable and necessary object would be accomplished but also that the companies which had given practically no attention to the compilation of accident statistics would take up the matter and with the co-operation and help of the Statistical Committee lay plans for the future handling of the business upon a more intelligent and sound basis.

Accordingly a Statistical Committee of the Bureau, composed of five companies writing personal accident business, was formed which was instructed to take immediate steps toward obtaining the statistical data necessary. The following subjects were pointed out as particularly in need of study:

- (1) Accumulation feature;
- (2) Automobile hazard;
- (3) Life indemnity feature;
- (4) Beneficiary feature;
- (5) Partial disability indemnity feature;
- (6) Hospital and surgeons' fees feature;
- (7) Amounts paid for disfigurement and dismemberment;
- (8) Experience—gunshot wounds.

The Committee in taking up its work decided that, in view of the necessity for early results from the investigation and the desirability of having as many companies as possible contribute to the experience, the plan of work be made as simple as possible. It was found that some companies had experience in rather elaborate form, while others had it in much less complete condition and

others had no experience whatever. In view of this it was decided to call for only the essential information which would give rather rough but reliable information in regard to the cost of the various features and hazards—leaving to the future a more detailed investigation if thought necessary.

The following fundamentals were laid down by the Committee with regard to the plan of the experience examination:

1. Only that experience based upon risks insured in the preferred classes shall be used in the investigation.

This rule was established for the reasons that the great bulk of personal accident business is written in these classes and that not only are the newer hazards, such as automobile and travel, present in the greatest degree among these risks but to these classes are granted those policies which carry the maximum of special features.

2. Experience shall be furnished upon a "policy year" basis; that is, losses shall be related back to the year of business in which the contracts carrying the loss were issued.

3. The experience studied shall cover the ten-year period 1904–1913, inclusive, and shall show results by separate years.

In this way not only could the indications of succeeding years be studied but any combination of years' figures could be made.

4. All premium items shall be reported upon the basis of paid items—as distinguished from a written record—and losses and loss expense shall be reported upon a paid basis with estimates of outstanding items, if any.

The information furnished shall be upon a gross basis; that is, with reinsurance items of premiums and losses not deducted.

The following studies of the experience were then decided upon as well as the forms upon which the information was required:

(A) *Exhibit of Total Experience.*—Total premiums and losses—each division separately for each of the policy years 1904–1913, inclusive—the losses to show number and amount of claims paid, divided by nature of injury into death, dismemberment and indemnity; the dismemberment division to show loss of right hand, left hand, foot or eye.

From the information outlined above the results of all companies combined will be shown by policy year over the ten-year period. In this way any increase in the cost of the total business, according to the main divisions of benefits, can be observed. From this exhibit any tendency of the total business to show poorer or better results from

year to year will be shown; also increases or decreases in the cost of protection by the main divisions of benefits will be indicated. It is thought by the Committee that the seriousness of the trend of the total personal accident business toward underwriting loss—or toward increased underwriting loss—will be brought out in a most convincing manner.

(B) *Accumulation Feature*.—To show clearly the cost of the accumulation feature it was necessary to divide the claim information into that paid for single indemnity accidents and that paid for double indemnity accidents. Under each of these divisions two subdivisions of information were called for: (1) The total amount paid under the contract, including the amount resulting from the operation of the accumulation feature, and (2) the excess amount which was included in (1) and which was due solely to the operation of the accumulation feature.

The above information will show just what extra cost the accumulation feature has caused in each of the ten years of business under single indemnity accidents and under double indemnity accidents (injuries upon railway train, in burning building, in an elevator, etc.).

(C) *Automobile Feature*.—This examination is in two divisions. The first form covering injuries to persons riding in, operating or caring for automobiles, and the second covering losses not provided for in the first form, such as injuries to pedestrians. Under each division the information is shown by number and amount and by nature of injury—death, dismemberment and indemnity—the last including elective benefits, hospital benefits, surgeons' fees, etc., which are shown for each year of the ten-year period. Further, the excess payments which are included in the first examination of the claim information and which are due to the double indemnity feature are shown in a similar manner by nature of injury.

By measuring this information against the total premiums we can obtain a valuable indication of the cost of the automobile hazard viewed from several standpoints. The frequency of such accidents will also be obtained.

(D) *Double Indemnity Feature*.—The analysis of losses under this feature will be made by cause of injury shown for each year of business. The causes by which the claims are to be divided are as follows:

Steam Cars, Burning Buildings,
 Street Cars, Elevators,
 Vessels, Common Carriers—not otherwise classified,
 Lightning, Collapse of Walls,
 Tornado, Steam Boiler Explosion.

For each cause the total claims paid—number and amount—under this feature and the excess payments due to the double indemnity feature (included in the first division of claims just mentioned) will be shown by nature of injury (death, dismemberment and indemnity—including elective benefits, etc.) for each policy year. In case payment is made for triple or quadruple indemnity, provision is made for returning this information upon separate blanks.

The above call for information may appear too complex but the divisions outlined are necessary in order to weigh properly the cost of this most expensive additional benefit.

(E) *Beneficiary Feature*.—In this division losses are to be analyzed simply for the number and amount paid in each policy year.

By placing these claim costs against the total premiums a satisfactory measure of the increase in cost due to the beneficiary feature can be obtained.

(F) *Partial Disability Indemnity Feature*.—Recognizing the difficulty of obtaining information from the companies upon this feature the call for statistics was for three policy years only—1911, 1912 and 1913. The division of losses called for was by amount of total disability for each year and amount of partial disability.

From this information the relative increased cost due to the partial disability feature can be obtained. The expense of this feature, also, as measured against the total premiums, should be enlightening.

(G) *Hospital and Surgeons' Fees Feature*.—It was pointed out by the Committee that the amount paid in excess of weekly indemnity only—not that paid in lieu thereof—was desired.

In this study the total amounts of hospital fees and fixed surgical fees, shown separately, were called for, for each year of the ten-year period.

(H) *Gunshot Wounds*.—The claim information in this case is to be divided into self-inflicted wounds and those not self-inflicted. The number and amount of claims paid by nature of injury in each state for each policy year for these divisions of the claims was called for by the Committee.

The purpose of this investigation is to throw light upon the increasingly large number of claims for gunshot wounds in certain localities.

The Committee considered that the study of the life indemnity feature could best be deferred, particularly in view of the fact that the companies had not as yet obtained sufficient experience to throw light upon its cost. Likewise, an examination of the amounts paid for disfigurement and dismemberment was considered of minor importance at this time and was deferred till a later date.

The question of calling upon the companies for statistics relative to health insurance was gone into by the Committee and it was decided that the cost of the various additional features and increasing hazards of the personal accident business was of most importance at this time and that the work of the Committee along the lines of health experience could be left for the future. The Committee recognized the importance and necessity of work upon health experience but simply deferred it because of the paramount importance of investigation of personal accident experience.

The above is a rough outline of the scope of the work undertaken at this time by the Committee on Statistics. All of the company members of the Bureau have expressed their willingness to co-operate so far as possible in furnishing the experience data requested. Also, those companies which up to this time have paid practically no attention to the compilation of accident statistics or which have done this work only in a most elementary way have recognized the necessity for such work and have agreed to put into operation a plan for obtaining statistical information in the future. Such assurance by company managers indicates an understanding upon their part of the importance and value of work along this line. The Committee, which has had some experience in the past in similar efforts to obtain experience data from the companies, tries not to be too optimistic of the outcome of this investigation. It feels, however, that, in view of the urgent necessity for light upon this subject, the company managers will go to considerable trouble and expense to work out a solution. It hopes at any rate that its work will be productive of valuable results and that the indications given by the experience obtained will be taken to heart by company managers.