Guide for Medical Examiners

The
Connecticut Mutual Life
Insurance Company
Hartford, Conn.

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GUIDE FOR MEDICAL EXAMINERS

Medical Examiners receive their appointments directly from the Home Office, after careful investigation by our Medical Referee, and no agent has any controlling voice in the matter either as to primary nomination or subsequent selection. Examiners will, therefore, realize that, in the performance of their duties, they are responsible to the Company alone and not to any person interested in the risk as agent or otherwise.

Medical Examiners are selected to officiate in the particular fields defined in their letters of appointment, and are not expected to make examinations elsewhere. Removal of one's residence, therefore, to a new locality may be considered as equivalent to a resignation of the office of Examiner. And when one so changes his residence he should at once notify the Home Office, suggesting to them the name of a competent and trustworthy successor in the field he is leaving, and at the same time acquaint them with his new address.

Appointments as Examiner are valid during the pleasure of the Company until the age of seventy years, after which Examiners are subject to retirement because of age.

In places of considerable size it is our custom to appoint one "Examiner" and one or more "Alternate Examiners." Agents are instructed to employ the Examiner in every instance, if possible, the services of the Alternate Examiner being only required in the absence or disability of the Examiner.

The fee for a medical examination, including analysis of urine as to reaction, specific gravity, and presence of albumen or sugar, will be five dollars.

When a microscopic examination is required by our rules, or directed from the Home Office (and in such

instances only), a fee of five dollars additional will be allowed.

These fees are held to cover all subsequent investigation that may be necessary in connection with a given application; as, for example, when further analysis of the urine is required, or re-examination of the heart or lungs asked for.

No extra fee is paid for traveling expenses unless previously authorized by the Home Office.

Fees are in all cases paid to Medical Examiners by the Company, and remain the same without regard to the acceptance or rejection of risks.

When very large policies (the Company's limit being $50,000) are asked for, and in some exceptional instances, examinations by two physicians may be required by the Home Office. Such examinations should never be conducted jointly, but each Examiner must make his examination independently and apart from the other.

When an Examiner has knowledge respecting an applicant leading him to regard the risk as undesirable, he should decline to make the examination, unless specially directed to do so from the Home Office. And, also, he should immediately notify the Company on one of the confidential letter sheets provided for such purposes, stating the reasons for his refusal to examine, together with the name, age, and residence of the applicant.

In every instance where an Examiner declines or postpones an applicant, or finds him for any reason unacceptable, whether an application has been made out or not, one of our confidential blanks above referred to should be filled in and mailed to the Company *at once*.

Medical Examiners' Reports are always to be made upon the printed blanks provided by the Company for that purpose. They must be in the handwriting of the Examiner and written in ink, with all alterations, interlineations, and erasures authenticated by the addition of his initials. The Company regards such reports as confidential communications, not to be made public without the consent of the Examiner.

Every examination must be made in private, no agent nor other third party being present during any part of

it. When possible, we prefer to have examinations made in the private office of the Examiner, but if, for any reason, this is found impracticable, we expect our Examiner to be willing to accommodate the applicant and agent by going elsewhere. He must, however, insist that the place selected shall be sufficiently quiet and free from interruption to permit of careful, thorough, and accurate investigation.

It may occasionally occur that the information elicited will be of such a character that the Examiner will hesitate to place it upon the Report as fully as is desirable. In these cases we invite correspondence with the Medical Director at the Home Office, where all such communications are held strictly confidential; and in every case where the applicant requests it, or the Examiner deems it advisable, the Report itself is to be sealed in an envelope supplied for the purpose before being delivered to the agent for transmission to us, or it may be mailed direct to the Home office.

No examination should be entered upon until the applicant has completed and signed his application.

The Examiner should then read over the application in order to obtain a general idea of the character of the risk, noting such points as he may wish to investigate during his examination.

All communications concerning the Examiner's duties should be addressed to "The Connecticut Mutual Life Insurance Company, Hartford, Conn.," and all instructions will be received by him direct from the Home Office.

The Connecticut Mutual Life Insurance Company asks its Medical Examiners to carefully consider that their relation to the Company is peculiarly a confidential one. They are its trusted agents to procure for it information not otherwise attainable, upon which principally will depend the selection of its risks, and upon these fundamentally depend its success and safety. The manner in which they as Medical Examiners perform their duties directly and vitally affects the value of the provision here made for the families of policy-holders, who alone are members of the Company.

Improper selection increases the rate of mortality

and the cost of insurance. It is the constant aim of the managers of this Company to give its present members their insurance at the lowest attainable cost, and to extend the benefits of the association to those new members only whose admission will conduce to this end. They, therefore, desire only those lives whose chances of attaining the full limit of human longevity are unimpaired by present or past disease or injury, by unfavorable habits, location, or occupation, or by derivation from a diseased ancestry.

In this they must rely chiefly upon the skill, care, and integrity of their Medical Examiners, whose scope of inquiries is by no means limited by the blanks, nor by any inelastic methods.

For further information than that found in these pages pertinent to various doubtful questions that necessarily must constantly arise Examiners are respectfully referred to such special treatises as Greene's "Examinations for Life Insurance," Stillman's "The Life Insurance Examiner," Keating's "How to Examine for Life Insurance," Sieveking's "Medical Adviser in Life Assurance," and others of a similar character.

The Application and Examiner's Report, in which will be found all needed suggestions as to the mode of procedure, are intended to cover these three vital points, viz.: the family history, the personal history, and the present physical and mental condition of the applicant. Investigation in these three directions must develop and determine the quality of the risk.

Examiners will notice that the Application and Examiner's Report are upon separate sheets of paper, and that all questions relating to the family and personal history asked in the application are substantially repeated in the Examiner's Report. Our object in this arrangement is twofold:

First. We desire that the Medical Examiner shall acquaint himself with all the statements of the applicant.

Second. We wish not only that the applicant shall be cross-examined as to the matters contained in his application, and all doubtful and indefinite statements cleared up by the Medical Examiner, who must assure himself that the questions are fully comprehended and

intelligently answered, but also that his answers to the questions in the Medical Examiner's Blank shall be thoroughly independent and original answers.

By this method we seek to secure accurate and complete data upon which to estimate the advisability of accepting the risk.

We have reason to know that in some cases the habit prevails among Examiners of copying the answers previously made in the Application into the Examiner's Report without asking them anew. A moment's reflection will show that such a course directly defeats one of the principal objects of our methods. We desire, therefore, to emphasize the rule that *every such question in the Examiner's Report must be asked by the Examiner and answered by the Applicant independent of any previous reply to a similar question.* When conflicting statements occur the Examiner is always expected to inquire carefully and explain the matter fully in his Report. When doubtful, ambiguous, or indefinite answers are given, it is incumbent upon the Examiner to clear them up, requiring the Applicant to obtain additional information, when possible, if necessary to a proper comprehension of the case. Having done this, he is to embody all the facts in his Report to us together with his estimate of the risk.

The question of moral hazard should be carefully considered by the Medical Examiner. A little tact in questioning will enable the physician to form an opinion as to whether the insurance sought is being honestly taken, or whether the applicant is "loading up" in view of some impending crisis. Whenever there is reason for suspicion we request a confidential communication from the Examiner upon the subject.

Special attention is called to some points incidental to the selection of female risks for Life Insurance.

The extra hazards over male risks are chiefly three:

1st. The moral hazard.

2d. Difficulties attending the personal examination.

3d. Increased mortality during menstrual activity.

We aim to eliminate the first by restricting our business to insurance upon the lives of women for amounts not exceeding $10,000 upon any single life and to those

upon whom other lives are financially dependent or who have independent means either from property or from their own earnings.

These restrictions will be carefully observed in order to avoid the moral hazard attendant upon taking risks on lives which, as a class, are not productive, but are ordinarily themselves dependent. We desire our Examiners to keep this point in mind, and, whenever they see ground for suspicion of such hazard, to confer with the applicant's family physician, or adopt such other means as they think best to satisfy themselves, and report the facts to us.

To guard ourselves on the second and third points of extra hazard we must rely mainly upon the acuteness and intelligence of our Medical Examiners.

Experience shows an increased death rate of females over males up to 45 years of age, and the causes most common are consumption, cancer, and uterine affections; therefore all clothing that hinders a proper and satisfactory exploration of the chest and abdomen, such as waists, corsets, or tight bands, should be removed previous to examination.

Notice whether the lungs and abdominal organs are habitually restricted by improper dress, and carefully inquire into the condition of the breasts and uterine organs. If pregnancy exists, postpone the case until confinement and lactation are passed and the menstrual function has become established regularly for at least three months. Ascertain whether the occupation and environment are injurious or such as to invite disease, and whether the general habits of life are healthful. Urinalysis in the case of females will, not infrequently, show the presence of albumen, blood, and pus, due to menstrual or leucorrhoeal discharge. Such cases call for the use of the microscope and the examination of more than one specimen of urine.

Answers to all questions should be precise but ample enough to convey a clear idea of the case, past and present, and of the reasons for reaching the conclusions arrived at. As it is deemed desirable, in the case of females, to have certain statements considered confidential, a special blank is provided for them, which Examiners are to fill out, and, when completed, witness the signature of the applicant thereto. This done, the statement must be placed in one of our envelopes (which agents will supply), sealed, and the Examiner's name and P. O. address affixed before handing it to the agent for transmission to the Company.

The rating of a risk in the Examiner's Report is expected to be based upon the case as a whole, including this additional statement, and therefore we require in the case of females that this special blank be filled out before the Examiner takes up the ordinary Medical Examiner's Report.

In conclusion we present to our Medical Examiners a business view of a certain matter which is probably regarded by most physicians in a usual professional light, in order to make clear if we can the fact that there are two distinct and even antagonistic points of view, and to define and accent the one to which ordinary professional life does not accustom him, but which is the one a life insurance company must always take and be strictly guided by if it would make a safe selection of risks: we mean the way in which any departure from a normal standard should be regarded by him in forming and expressing his opinions as to the desirability as a risk of an applicant undergoing examination at his hands.

The habitual point of view in which the practicing physician holds every person coming into his hands is that of a patient: a person being treated or looked at with a view to being treated, for the removal of an abnormal condition. That removal, its methods, its probabilities of success, all the resulting chances and conditions of treatment, are the matters of supreme interest to both physician and patient, and they determine the mental and moral attitude of each and are the key to whatever action is had. The question with the physician is, Can this man be cured? What are his chances of recovery? Do they balance for or against him? What encouragement can I give him? How much can I call upon his hope and stimulate it to give moral aid to my treatment? Are the chances so good that I can give him practically positive favorable assurance? Or must

I be content to accent strongly to his anxious ear only a fair probability? Or make the most of only a possibility? Or must I warn him to set his house in order?

These are the problems that consciously or unconsciously pass through the physician's mind and determine both his professional and his humane attitude toward his patient and, for the time at least, his friend. And knowing the practical value of mental and moral states in a patient, and their effect in promoting or retarding recovery, he naturally seeks to estimate and represent at their honest utmost the force and value of the favorable chances. He makes, and is warranted by his whole professional duty and purpose in making, as favorable a prognosis as possible. He counts up as many chances of living as possible. It is the chances of living and of recovery upon which his mind constantly dwells and which he deals out as stimulatingly as possible to his patient. And this is right. It is both scientific and humane.

But this is not the point of view, such is not the attitude toward an applicant, and these are not the questions with a life insurance company.

Its question is, When will this man die? What is there in his history, his inheritances, his condition, that grade him below a perfect normal? And how far below? And as it is impossible to guess who will be the individual exceptions in an abnormal group the company must test the vital effect of every departure from a normal standard, not by the physician's first question, whether this individual will possibly or probably recover normality; but taking a group, say of 1,000 men of the given abnormality observed in the case of the individual, it asks, How much more rapid will their mortality be, how much shorter average time will they live, than 1,000 such without the abnormality? The physician hopes and strives to rescue his patient from the mortality of the group in which his trouble places him. The life insurance company knows that this is too great an uncertainty for it to count upon; that it cannot pick out from the group the man who may not suffer with it; that it must expect and cannot escape the average mortality of the group, and that therefore it must assume that each man will suffer that mortality.

It cannot undertake to say that this man or that man will probably recover; that in this case or that case the progress of diseased or abnormal conditions will be wholly suspended, or be more or less rapid. It cannot deal with questions of prognosis. It has no way of dealing with individual chances. It must, therefore, wholly exclude questions of prognosis by excluding all cases where the condition of the applicant is for any cause, in personal or family history, such as to raise them. Its question is, Does this man certainly belong to the class of long livers; not, Can he probably be rescued from the class of shorter livers: Is he sound; not, Can he be probably cured of unsoundness or possibly escape its average consequences?

We do not undertake to grade our risks according to degree of abnormality and charge a premium according to the prospect of death. We can only undertake to insure those who are entitled to the same scale of premiums; who are subject to only the same average mortality. Our premiums are computed for risks selected for their soundness. We cannot afford to take any other. We cannot justly make sound men pay for unsound men. Mutuality means an equal basis of cost. Our question is, Is this man thoroughly sound in personal condition and his inheritances? not, How near does he come to it? nor, Can he probably escape the effects of his unsoundness? for that is, so far as we are concerned, mere guesswork. We know that the unsound group taken as a whole cannot escape a higher death rate. It is only because we can group men that we can take their risks at all. We must, therefore, govern ourselves rigidly by the mortality of the group. Class becomes all-important. Men's risks will cost us according to the average mortality of the class to which they belong. We must classify correctly.

We must therefore ask our Examiners to bear always in mind that when they undertake an examination for us their professional attitude entirely changes. They have no longer before them the question whether under their treatment the individual would probably be recovered from any unsoundness or so defended from its results as to suffer no effect upon his normal chances of life, but

simply whether he is sound; whether there is anything in his condition or history that affects unfavorably those normal chances. We ask them to see with our eyes and for us.

And we ask them to also bear in mind that the attitude of a patient toward his physician is very different from that of an applicant toward an Examiner. The patient is frank with his doctor, tells him all he wishes to know, and is inclined to magnify his symptoms and exaggerate their importance. Not so is an applicant with an Examiner. He answers the questions which are asked, usually tells only as much as is unavoidable, minimizes whatever is out of the way, naturally makes out as favorable a case for himself as he can, and if he is conscious of unfavorable conditions which are not plainly visible, he is reticent and leaves the Examiner to find out what he can for himself. Especial care is necessary in the examination of persons who have been once declined or postponed. Their desire to secure insurance and to prove themselves sound is apt to color their views and statements about themselves very strongly. The same is true of applicants for very large amounts.

Some Examiners are careful to present complete and true answers to the questions respecting specific facts, but seek to avoid responsibility for those general conclusions which involve their personal judgment on the case presented. But there are many things open to the view of the thoroughly competent and conscientiously careful Examiner which no question wholly calls out, but which ought to affect his personal conclusions as they ought to affect us if we knew them as he sees them. The facts which he records present to us a problem. He sees other facts which we do not see. He sees the man in his totality. We therefore ask him to look at our problem in the light of all he sees and knows, and to tell us, but from our point of view, how he would solve it, giving us the benefit of every doubt.

We ask your special attention to the following in connection with your examinations for us:

Age. Applicants are accepted between the ages of 16 and 65, both inclusive, and in certain instances up to 69½ years of age. In the young we wish to know that they have reached the usual physical maturity of their age. In the old whether degeneration, arterial and otherwise, has advanced noticeably. The old person whose faculties are active and arteries soft is often a safe risk, but great care must be exercised to avoid the individual who is at any age prematurely old.

Amputations. State point and cause of amputation and condition of stump. If artificial limb is used, state if it is easily worn or gives rise to pain and serious inconvenience. Only those cases will be considered which do not interfere with the health and activity of the applicant.

Appendicitis. State frequency and duration of attacks; whether any operation, and if so, date of same; whether appendix was removed; whether recovery was prompt and uncomplicated, and how long since complete recovery. State present condition of cicatrix, and whether any tendency to hernia. Is any support needed?

Asthma. State age when first noticed, frequency, character, and duration of attacks; whether nocturnal, and at particular seasons of the year only; whether cough, expectoration, or dyspnoea, and whether there is complete relief during interval of attacks. Is there emphysema, cardiac disease, Bright's disease, or nasal polypus, or other local cause? State if there is hereditary tendency, and what treatment is used during attacks, and with what result. Has change of climate or occupation been necessitated?

Blindness. Total blindness always disqualifies. When partial state cause, duration, whether progressive, and present condition of eyes.

Bronchitis. If present, disqualifies. If there have been recurrent or recent attacks, be especially careful to ascertain the cause and that the present condition of lungs is normal.

Calculus. *See Colic.*

Colic.

Hepatic. State frequency and duration of attacks, with date of last attack; whether calculi have been passed and found; whether any operation has been performed, and if so, with what results. What is present condition of liver and gall bladder?

Intestinal. State cause, frequency, and duration of attacks, with location of pain.

Renal. State how many attacks, with dates and duration, and whether calculi have been passed and found. Has there been any surgical operation, and if so, with what results? What is the present condition of kidneys as to size, location, and tenderness?

Deafness. Total deafness disqualifies. If partial, state cause, duration, whether discharge, past or present, and the present condition of tympanum and cavity. Always state whether ordinary conversation is heard readily.

Dizziness. *See Vertigo.*

Dyspepsia. State frequency, duration, and severity, and date of last attack; what change in diet is or has been necessary; whether any loss of weight or tendency to melancholia. In cases accompanied by consumption or insanity in the family history especial care is required.

Epilepsy. Disqualifies.

Family History. Where ages, causes of death, etc., are unknown, or very uncertain, Examiners will require the applicant to ascertain them, or, if this appears impracticable, endeavor at least to establish the general hereditary tendencies and longevity of the family, and that deaths were not caused by consumption, insanity, paralysis, apoplexy, heart disease, or any transmissible disease.

Fits. Ascertain the nature, cause, frequency, and date of last attack. Were they epileptic?

Gout. Our experience shows that great care is needed in these cases. State past and present conditions fully. Give frequency and duration of attacks, and what treatment is used during them.

Habits. Stimulants and Narcotics. Let your investigation under this head be thorough and painstaking. It is extremely important that we know the full truth as to what, when, and how often an applicant uses alcoholic stimulants or narcotics. We expect our Examiners in a tactful manner to ascertain the facts, and not to be satisfied with indefinite statements such as "moderate," "occasional," "when I feel like it," and the like. Scrutinize the applicant carefully, and, if you have cause to doubt the accuracy of his statements, try in other ways to obtain the facts and write us promptly regarding the matter. If their daily or frequent use is suspected, assure yourself that the stomach, liver, kidneys, and nervous system are free from any evidence of injury. Examiners should regard this as one of their most important duties to guard the interests of the Company in these matters, and not allow us to assume risk on lives of this class without having had all the facts obtainable placed before us.

Heart Murmurs. State whether organic or functional.

Organic murmurs alway disqualify.

Functional. State location of greatest intensity, area covered by, and character of the murmur, whether heard when respiration is suspended, whether intensity is increased or otherwise by exercise or by lying down, and whether it is *entirely absent* under any of these conditions. Be especially careful in such cases to note and state whether the normal sounds are heard in their proper locations.

Hip Joint Disease. State whether traumatic or otherwise, the duration of disease, present condition of joint, and amount of deformity.

Nervous Prostration. There is often a good deal of misunderstanding in the use of this term. Examiners should inquire carefully and state if true neurasthenia is meant, or only a temporary debility. State duration and severity of attack, whether recurrent, and whether there has been complete recovery.

Neuralgia. State location of pain, and history of the affection from its beginning. Discriminate from myalgia, and ascertain the cause of attacks and what treatment has been employed. Have opiates been used?

Occupation. Great care should be exercised to give a clear idea of occupation. Such terms as "clerk," "merchant," "mechanic," and all indefinite or technical terms such as "cutter," "finisher," "presser," and the like must be explained as to the particular kind of work the applicant is engaged in. Inquiry as to any unhealthful conditions associated with occupation, such as

bad air, dust, dampness, cold or intense heat or light, should be carefully made and the facts specifically stated.

Palpitation of the Heart. In our experience this is a serious symptom and not to be lightly passed over. Carefully ascertain its cause, examine the heart with great care as to size, position, and action, alike in standing, sitting, and prone positions, both when applicant has been quiet for some time and after active exercise. State all your findings clearly and fully.

Pleurisy. Our experience teaches us that a history of pleurisy should always excite a suspicion of tuberculosis, particularly if recurrent and the applicant past 40 years of age. Examine every such case with unusual care, all clothing removed from chest. Is vocal fremitus normal in all parts of the chest? Are the respiratory sounds full and clear everywhere? Is the percussion note normal and alike on both sides? Is the chest expanded evenly, or is there restriction at some points? Examiners cannot be too careful in these cases.

Pneumonia. *See Pleurisy.* All that is said there applies with equal force to pneumonia.

Pregnancy. Postpone until confinement and lactation are passed and the menstrual function has become regularly established for at least three months.

Pulse. *Rate.* The pulse should be counted a full minute, both in sitting and standing positions. If below 54, or above 90, count again after some delay, or on a second day. If constantly high, take temperature under tongue. Nervous people frequently have high pulse rate due to the excitement of examination. In these cases the Examiner may be able to count it while listening to the respiration, the applicant's attention being distracted from the heart. A rapid pulse always necessitates the careful exclusion of incipient phthisis, febrile, nervous, and cardiac affections, and the habitual use of stimulants. With slow pulse exclude fatty heart, hepatic, nervous, and digestive disorders.

Rhythm. If pulse is irregular or intermittent, state whether exercise increases or dimishes it, and also whether this condition is congenital.

Tension. State if increased or diminished, and note carefully any evidences of vascular disease and tendency to heart, renal or nervous disease.

Reflexes. In cases of so-called muscular rheumatism or myalgia, and whenever there is stiffness of muscles or any loss of control of extremities, the patella reflex should be taken and the result recorded in your report.

Rheumatism. State if acute inflammatory, or chronic; the duration, number, and full history of attacks; what joints were involved; whether there was any cardiac complication, and if any deformity or restriction of motion remains.

Scrofula. State just what is meant by the applicant when using this term. State if there is history of enlarged glands or suppuration, ascertain if the glands were removed, and if possible the result of microscopic examination.

Spitting of Blood. State frequency and date of last attack, whether clear blood or bloody mucus was raised, and whether there was cough or the blood was vomited. Give us as complete a history of the case as you can possibly obtain.

Sunstroke. Is important if recent or long continued, therefore state date and duration of attack. Search carefully for any remaining effects and state whether there are any discoverable.

Syphilis. Discriminate between true chancre and chancroid, and state which. Give date of initial lesion and character of symptoms that have been noticed. Look carefully for any cicatrix or other evidence of past disease. State what treatment was employed and how long continued, and, if a married man, inquire and state if he has healthy children and whether there have been any still births. Always examine carefully for degenerative changes in the nervous or circulatory organs.

Urinary Analysis. Analysis of a specimen of urine passed by the applicant in the Examiner's presence is required in every case. Be sure that the urine is that of the applicant, and examine it within 24 hours after it is voided.

BRIEF RULES FOR URINALYSIS.

Albumen. After noting the color, reaction, and specific gravity, fill a *clean* test tube half full of the

clear urine (previously filtered if turbid), and holding it at an angle of 45 degrees, allow nitric acid to trickle gently down its side and form a stratum, under the urine, at the bottom of the tube. If carefully done the two fluids will not mingle. Should any hazy or whitish cloud be observed at the point where the urine and acid meet, apply heat, and if the cloud remains albumen may be considered present.

NOTE. Urine containing resinous matters, as when a patient is taking turpentine or balsam copaiva, will sometimes give a whitish-yellow cloudiness, similar to albumen, with nitric and hydrochloric acids. The addition of alcohol will cause this to disappear at once.

It is important to hold the test tube in a proper light in order to distinguish slight changes, where only a small amount of albumen is present. The best way is that advised by Dr. John Munn, viz.: Place some dark material over the lower part of the window, as a background, and draw the shade down to it. Now, holding the test-tube a little way from this background, lift the shade forward, enough to allow the rays of light to pass through the tube without shining into the eyes. In such a light and against the dark background very slight opacity becomes visible.

Sugar. Fill a clean test-tube to the depth of half an inch with Fehling's standard test solution and boil it. If it is *pure* and *reliable* it will remain clear and of a dark blue color. While the clear solution is hot, add the urine, a few drops at a time. Sugar will cause a deep yellow or orange-colored precipitate before the amount of urine added *equals the quantity of test solution employed.* If there is no change, once more heat to boiling and stand it one side. When cool, if there is no change sugar may be considered absent. Squibb's Fehling Test Solution is reliable and can be obtained through any druggist. Unless the reaction for sugar is positive the fermentation test should be used in addition to the above, as a number of conditions not due to the presence of sugar frequently cause turbidity or a greenish color with Fehling's test.

Specific gravity. When the specific gravity is above or below normal, or albumen or sugar are present in

very small quantity, it will be well to collect the total secretion of 24 hours and examine a sample of this mixed urine.

Microscopic examination is always to be made when the amount of insurance applied for is $25,000 or more, and when in a case *otherwise acceptable* there is a suspicion of disease requiring its aid for assurance, as where there is a history of calculus, or cystitis, and at other times only as directed from the Home Office. Every specimen examined microscopically must have been allowed to stand and settle for two hours, or the centrifuge must be used to procure the sediment.

Vertigo. State frequency and duration of attacks, whether accompanied by mental confusion or unconsciousness, by scintillations of light, or unnatural sounds in the ears, by pain, nausea or vomiting. Examine carefully for evidences of epilepsy, neurasthenia, and heart, renal or digestive diseases.

Weight. *Heavy weights* have not been found to be desirable risks after fifty years of age. In all such cases state whether the weight is occasioned by fat. Are the muscles hard and firm? Has the applicant a large, bony frame? Is it a family peculiarity? And if so, state in which members of the family it has been noticed. Is the applicant active and quick in his movements? Is he a free user of alcoholic stimulants, or a very heavy eater? Information on all these points is needed to determine the safety of the risk.

Light weights have been found to be undesirable, particularly if associated with dyspepsia or a consumptive family history. State if the weight is a family peculiarity, and if appetite and digestion are good. Is the applicant of a wiry build? Is he particularly nervous? Any sudden change in weight should be very carefully investigated and the facts clearly stated.

AMERICAN TABLE OF MORTALITY.

Age.	Surviving.	Per cent. of Mortality.	Expectation of Life.	Age.	Surviving.	Per cent. of Mortality.	Expectation of Life.
10	100,000	.7490	48.7	55	64,563	1.8571	17.4
11	99 251	.7516	48.1	56	63,364	1.9885	16.7
12	98,505	.7543	47.4	57	62,104	2.1335	16.0
13	97,762	.7569	46.8	58	60,779	2.2936	15.4
14	97,022	.7596	46.2	59	59,385	2.4720	14.7
15	96,285	.7634	45.5	60	57,917	2.6693	14.1
16	95,550	.7661	44.9	61	56,371	2.8880	13.5
17	94,818	.7688	44.2	62	54,743	3.1292	12.9
18	94,089	.7727	43.5	63	53,030	3.3943	12.3
19	93,362	.7765	42.9	64	51,230	3.6873	11.7
20	92,637	.7805	42.2	65	49,341	4.0129	11.1
21	91,914	.7855	41.5	66	47,361	4.3707	10.5
22	91,192	.7906	40.9	67	45,291	4.7647	10.0
23	90,471	.7958	40.2	68	43,133	5.2002	9.5
24	89,751	.8011	39.5	69	40,890	5.6762	9.0
25	89,032	.8065	38.8	70	38,569	6.1993	8.5
26	88,314	.8130	38.1	71	36,178	6.7665	8.0
27	87,596	.8197	37.4	72	33,730	7.3733	7.5
28	86,878	.8264	36.7	73	31,243	8.0178	7.1
29	86,160	.8345	36.0	74	28,738	8.7028	6.7
30	85,441	.8427	35.3	75	26,237	9.4371	6.3
31	84,721	.8519	34.6	76	23,761	10.2311	5.9
32	84,000	.8607	33.9	77	21,330	11.1064	5.5
33	83,277	.8718	33.2	78	18,961	12.0827	5.1
34	82,551	.8831	32.5	79	16,670	13.1734	4.7
35	81,822	.8946	31.8	80	14,474	14.4466	4.4
36	81,090	.9089	31.1	81	12,383	15.8605	4.0
37	80,353	.9234	30.3	82	10,419	17.4297	3.7
38	79,611	.9408	29.6	83	8,603	19.1561	3.4
39	78,862	9586	28.9	84	6,955	21.1359	3.1
40	78,106	.9794	28.2	85	5,485	23.5552	2.8
41	77,341	1.0008	27.5	86	4,193	26.5681	2.5
42	76,567	1.0252	26.7	87	3,079	30.3020	2.2
43	75,782	1.0517	26.0	88	2,146	34.6692	1.9
44	74,985	1.0829	25.3	89	1,402	39.5863	1.7
45	74,173	1.1163	24.5	90	847	45.4545	1.4
46	73,345	1.1562	23.8	91	462	53.2468	1.2
47	72,497	1.2000	23.1	92	216	63.4259	1.0
48	71,627	1.2509	22.4	93	79	73.4177	0.8
49	70,731	1.3106	21.6	94	21	85.7143	0.6
50	69,804	1.3781	20.9	95	3	100.0000	0.5
51	68,842	1.4541	20.2				
52	67,841	1.5389	19.5				
53	66,797	1.6333	18.8				
54	65.706	1 7396	18.1				

TABLE OF HEIGHT AND WEIGHT AT VARYING AGES.

Based upon an Analysis of 74,162 accepted Male Applicants for Life Insurance, as reported to The Association of Life Insurance Medical Directors, 1897.

The Light Figures are 20 per cent. over and under the average.

AGES.	15–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69
	96	100	102	105	106	107	107	107	105	
5 ft. 0 in.	120	125	128	131	133	134	134	134	131	
	144	150	154	157	160	161	161	161	157	
	98	101	103	105	107	109	109	109	107	
1	122	126	129	131	134	136	136	136	134	
	146	151	155	157	161	163	163	163	161	
	99	102	105	106	109	110	110	110	110	
2	124	128	131	133	136	138	138	138	137	
	149	154	157	160	163	166	166	166	164	
	102	105	107	109	111	113	113	113	112	112
3	127	131	134	136	139	141	141	141	140	140
	152	157	161	163	167	169	169	169	168	168
	105	108	110	112	114	115	116	116	115	114
4	131	135	138	140	143	144	145	145	144	143
	157	162	166	168	172	173	174	174	173	172
	107	110	113	114	117	118	119	119	118	118
5	134	138	141	143	146	147	149	149	148	147
	161	166	169	172	175	176	179	179	178	176
	110	114	116	118	120	121	122	122	122	121
6	138	142	145	147	150	151	153	153	153	151
	166	170	174	176	180	181	184	184	184	181
	114	118	120	122	124	125	126	126	126	125
7	142	147	150	152	155	156	158	158	158	156
	170	176	180	182	186	187	190	190	190	187
	117	121	123	126	128	129	130	130	130	130
8	146	151	154	157	160	161	163	163	163	162
	175	181	185	188	192	193	196	196	196	194
	120	124	127	130	132	133	134	134	134	134
9	150	155	159	162	165	166	167	168	168	168
	180	186	191	194	198	199	200	202	202	202
	123	127	131	134	136	137	138	138	139	139
10	154	159	164	167	170	171	172	173	174	174
	185	191	197	200	204	205	206	208	209	209
	127	131	135	138	140	142	142	142	144	144
11	159	164	169	173	175	177	177	178	180	180
	191	197	203	208	210	212	212	214	216	216
	132	136	140	143	144	146	146	146	148	148
6 0	165	170	175	179	180	183	182	183	185	185
	198	204	210	215	216	220	218	220	222	222
	138	142	145	148	149	151	150	151	151	151
1	170	177	181	185	186	189	188	189	189	189
	204	212	217	222	223	227	226	227	227	227
	141	147	150	154	155	157	155	155	154	154
2	176	184	188	192	194	196	194	194	192	192
	211	221	226	230	233	235	233	233	230	230
	145	152	156	160	162	163	161	158		
3	181	190	195	200	203	204	201	198		
	217	228	234	240	244	245	241	238		