



Life Insurance: How Much Do We Need?

Glennis M. Couchman

Family and Consumer Economics Specialist

Karen Fox Folk

Assistant Professor, Consumer Economics
University of Illinois

Life insurance needs are like fingerprints — no two people's are just alike. Age, income, family obligations, and lifestyle shape the amount of protection needed. The needs of a young parent will differ drastically from the needs of a single person with no dependents. The purpose of life insurance is to protect dependents against the risk of financial hardship at the death of an earner. Life insurance cannot lessen the emotional loss caused by the death of a loved one. However, it can reduce financial burdens by replacing or partially replacing lost earnings. It helps to ensure that the family will have the income needed to maintain a household. Other people buy life insurance with a cash value so when the need for protection passes, the policy will generate income in retirement.

To determine the sufficient amount of life insurance you need, you should analyze 1) the amount needed to protect economic well-being and 2) what you can afford to pay for protection. There are several methods of determining life insurance needs.

Using an income multiplier. You multiply annual gross income of the insured by the number of years the income is needed (usually 6 to 10) to estimate amount of insurance coverage. This method is easy to use and provides a level of protection much higher than average. A disadvantage is that it ignores both Social Security survivor's benefits and assets of the family. Social Security payments can add up to more than \$100,000 over the years for someone who dies when children are young. Also, the method does not figure the interest earned on invested insurance funds. This interest could help replace lost income.

Estimating future needs. You estimate the dollar amount needed to cover funeral expenses, pay off debts, replace lost earnings and college expenses of children. To estimate income available to the family, add Social Security benefits, income from assets, and spouses' earnings. Most surviving spouses find employment, but their education, training, and work experience determine their income. Your spouse's income may not be enough to cover the family's monthly expenses. Figure 1 lists the future needs and income resources available to a family. Calculate the amount of insurance needed based on the gap between future needs and future income. This method takes time, but the estimates derived reflect true needs more accurately as you take into account the dollar difference between assets and Social Security payments.

Figure 1. Determining Life Insurance Needed

Current and Future Needs		Income Resources Available	
Monthly living Expenses		Government benefits	
Funeral and final expenses		Savings and investments	
Readjustment expenses	<i>minus</i>	Existing insurance	<i>Difference Equals Amount of Life Insurance Needed</i>
Debt repayment expenses		Asset equity	
Children's college costs		Income of spouse	

Relying on an agent's estimate. This method requires little effort on your part, but keep in mind who is making the estimate. Agents will make many assumptions about your family's needs when calculating amounts of life insurance needed. You know your family's needs better than anyone else. It is in your interest to make those assumptions yourself.

Which method should you use?

Now that you know some of the pros and cons of each method, the choice is yours. All methods produce estimates based on your values, goals, and the assumptions you make. The amount of life insurance needs differs for each family. A family may want to have enough insurance so one parent can be at home with children. Another family may only need insurance to support the family when the children are young. They assume that the surviving spouse can live on his or her earnings when children are grown.

The "How Much is Enough" Worksheet in Appendix I can help you estimate needs. Fill out a separate worksheet for each earner or person responsible for dependents in the family. Adjust the worksheet as necessary to fit your family situation. Read the directions for each step as you work.

Step 1. Expenses at the time of death. Burial expenses may be \$4,000 to \$8,000. Estate taxes and probate costs only apply to large estates. Estates worth over \$600,000 pay federal estate taxes.

Step 2. Payment of debts. You may want to have insurance benefits pay off outstanding debts at death. Include car loans, credit card balances, etc., but do not include those covered by credit life insurance. Credit life insurance pays off your loan automatically.

Paying off the mortgage on your house is a personal decision. If you decide to have your spouse continue payments, do not list your mortgage as a debt.

Step 3. Education fund for family members. This fund includes future costs of higher education for children and/or the surviving spouse. In 1996, four years at a state-supported university/college in Oklahoma averaged between \$22,000 and 25,000 while private school costs were twice that amount.

Step 4. Short-term income and/or emergency fund. Your family will need some immediate income during estate settlement. The amount needed is usually three months take-home pay. If your family does not have an emergency fund, you may want to add \$10,000 or an additional two to four months take-home pay.

Step 5. Long-term income replacement. Estimate your family's future income and living expenses using the *Step 5 Worksheet: Future Income*

Needs (see Appendix II). You must estimate separately for each of four periods because expenses, Social Security payments, and spouse's income will differ for each period. Remember that you are estimating future needs. You may have to estimate what your spouse will earn or how long your spouse will live. The following instructions are for completing the *Step 5 Worksheet: Future Income Needs*.

Outgo. Figure living expenses based on your current level of living. You might use 80 percent of your gross annual family income until your children reach 18. Use 40 percent to 65 percent for periods when children are grown. You may need to estimate the cost of hiring lost services of your deceased spouse.

Income. 1) Estimate your spouse's annual income for each period. 2) To receive estimated Social Security benefits for spouse and children, contact your local Social Security office for the Earnings and Benefit Estimate Statement request form. Complete the request form and mail to the Social Security Administration. You should receive your statement within 6 weeks. Enter the estimated survivor's income on the appropriate income line on the Step 5 Worksheet: Future Income Needs (Appendix II). A spouse is eligible for benefits while one child is less than 16 years and again when the spouse reaches age 60. Unmarried children receive benefits until age 18. Your family may receive benefits only if you have regularly paid Social Security taxes. 3) For each period, add the spouse's estimated annual income and Social Security benefits together to get total income.

Difference between Income and Outgo. Subtract total income (2) from annual living expenses (1) to get income needed in each period. If income is greater than expenses, enter zero for income needed. After calculating Total Income Needed, divide by the total number of years in the four periods to get Average Annual Income Needed. Enter this amount in Step 5A on the "How Much is Enough" Worksheet, Appendix I.

Adjust for Investment and Inflation (line 5B "How Much is Enough Worksheet"). If your family needs \$5,000 per year for 25 years, you might think they would need \$125,000. However, they do not need the entire \$125,000 at the time of your death. If they withdraw \$5,000 per year from the insurance funds, the remainder will earn interest. The investment factors in Table 1 adjust for interest earnings and inflation.

Enter the investment factor (See Table 1) corresponding to the number of years your family will need income on line 5B. Multiply average income

Table 1. Income Needed and Investment Factors.

Years Income Needed	Investment Factor*
15	13
20	17
25	20
30	22
35	25
40	27
45	30
55	31
60	35

* assume 2% real growth after inflation and taxes.

needed (A) by the investment factor (B). The answer is the total family net-income needed (C).

Step 6. Grand total of family income needs. Add amounts in Steps 1, 2, 3, 4, and 5C.

Step 7. Assets. Include anything convertible to cash or an income-producing investment. Include:

- A. Cash, savings, and investments. Amounts in checking accounts, savings, mutual funds, stocks, bonds, and IRAs.
- B. Equity in real estate. Include the equity value of your house only if your family would sell the house and live with relatives or rent. Also, include equity in rental or vacation property.
- C. Employer pension benefits. Most pension plans pay a death benefit to survivors. You can find this amount listed on annual pension statements.
- D. Current life insurance. Include employer-provided group insurance as well as personal policies.

Add the assets listed in A through D and enter the total for the Grand Total of Assets you have.

Step 8. Estimated amount of life insurance needed. Subtract the grand total of assets from the grand total of income needs to estimate life insurance needed. Estimating future needs is a very practical method for planning insurance purchases.

If, like most families, you lack enough insurance, you may find it impossible to pay for an additional \$50,000-\$100,000 worth of insurance. Do not despair! If you shop wisely, protecting your family against financial hardship may cost less than you think. Extension publication T-4131,

"Why and How to Buy Life Insurance" gives advice on planning a life insurance program.

If yours is a young family with high needs for insurance, buying term insurance may be the only way to protect your family. For example, in 1996, a 35 year-old-man, non-smoker needing \$200,000 of life insurance could buy a 5-year renewable term policy for \$300 to \$350 per year, while a \$200,000 whole life policy would cost \$2,000 to \$2,600 per year. A \$200,000 universal life policy would cost approximately \$1,500 to \$2,000 per year.

If your budget does not stretch to allow for the premium on a term policy, consider changing the assumptions you used in the worksheet. Recalculate to see how much insurance you would need to maintain the family's level of living until the last child is 18 years. Also, reduce the amount allowed for children's education fund. Assume the children will work and apply for scholarships to get through school.

Remember that family life insurance needs change over the years. Review insurance needs periodically. Review the policy after the birth of a child or death of spouse, or after assuming a large debt or financial support to aging parents. Newly married couples may not have a need for life insurance. As children are born, insurance needs increase dramatically. If either spouse changes employment, group life insurance benefits and salary may both change. Keep the estimate of your needs with other life insurance records. Recalculate insurance needs when the family situation changes.

References:

- American Council of Life Insurance. (1987). *A consumer's guide to life insurance*. Washington, DC.
- American Council of Life Insurance. (1988). *How to answer basic questions about life and health insurance*. Washington, DC.
- Fletcher, Cynthia N. and Jane Schuchandt, *Money Mechanics: Life insurance*. Cooperative Extension Service, Iowa State University.
- Garman, Thomas E. and Raymond E. Forgue. (1994). 4th ed. *Personal finance*. Boston: Houghton Mifflin Co.
- "How much life insurance do you need?" (1989, July 17). *U.S. News & World Report*, 58.
- Kapoor, Jack R., Les R. Dlabay and Robert J. Hughes. (1994). 3rd ed. *Personal finance*. Boston: Irwin.
- "Life insurance after 40." (1989, May). *Changing Times*, 65-70.

Appendix I. "How Much is Enough" Worksheet

Step 1. Expenses at the time of death		\$ _____
Step 2. Payment of debts		\$ _____
Step 3. Education fund for family members		\$ _____
Step 4. Short-term income and/or emergency fund		\$ _____
Step 5. Long-term income replacement		
A. Average annual income needed	\$ _____	
(from Step 5 worksheet, Appendix II)		
B. Investment factor (from Table 1)	\$ _____	
C. Total family net - income need (multiply A x B)	\$ _____	
Step 6. Grand total of income your family needs		\$ _____
(Add amounts from Steps 1, 2, 3, 4 and 5C)		
Step 7. Assets you have		
A. Cash, savings and investments	\$ _____	
B. Equity in real estate	\$ _____	
C. Lump-sum employer pension benefits	\$ _____	
D. Current life insurance	\$ _____	
Grand total of assets		\$ _____
Step 8. Estimated amount of life insurance needed		\$ _____
(subtract grand total in Step 7 from grand total in Step 6)		

Adapted from: Fletcher and Schuchardt, "Money Mechanics: Life Insurance," Cooperative Extension Service, Iowa State University, 1986.

Appendix II. Step 5 Worksheet: Future Income Needs

	*Period I	*Period II	*Period III	*Period IV
Outgo				
Annual Living Expenses (1)	_____	_____	_____	_____
Income				
Spouse's Estimated Annual Income	_____	_____	_____	_____
Social Security Survivor's or Retirement Benefits	_____	_____	_____	_____
Total Income (2)	_____	_____	_____	_____
Difference between Income and Outgo				
Income Needed (2-1)	_____	_____	_____	_____
X Number of Years in Period	_____	_____	_____	_____
= Income Needed for Period	_____ (3)	_____ (4)	_____ (5)	_____ (6)
Total Income Needed	_____			
Sum of Periods I-IV (3 + 4 + 5 + 6)				
Average Annual Income Needed	_____			
(Total Income Needed ÷ Total Years in Periods I-IV)				
Enter this figure in 5A of the "How Much is Enough" Worksheet, Appendix I.				

Periods

- *I From now until first child is 18.
- *II From first child's 18th birthday to last child's 18th birthday.
- *III From last child's 18th birthday until remaining spouse is 60 years old.
- *IV From age 60 to estimated year of death.

The Oklahoma Cooperative Extension Service

Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; home economics; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective and based on factual information.
- It provides practical, problem-oriented educa-

tion for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.

- It utilizes research from university, government and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Charles B. Browning, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of \$933.00 for 5,000 copies. #6844 0696 Ck Revised.