## Chapter 10

# Managing Loss Exposures: Risk Management

## Educational Objectives

After studying this chapter, you should be able to:

1. Identify and describe the steps in the risk management process. (pp. 10-4 to 10-20)
2. Identify and describe various methods of identifying loss exposures. (pp. 10-5 to 10-8)
3. Explain why measuring loss frequency and loss severity is important in analyzing loss exposures. (pp. 10-8 to 10-10)
4. Identify and describe various risk management techniques. (pp. 10-10 to 10-14)
5. Describe the financial criteria and the guidelines for selecting the risk management techniques that are most appropriate in a given situation. (pp. 10-14 to 10-17)
6. Describe procedures for implementing risk management techniques. (pp. 10-18 to 10-19)
7. Describe procedures for monitoring and modifying a risk management program. (pp. 10-19 to 10-20)

8. Explain how each of the following can benefit from sound risk management: (pp. 10-20 to 10-22)
   a. Businesses
   b. Individuals and families
   c. Society
   d. Insurers
9. In a given case, recommend and justify risk management techniques appropriate for an individual, a family, or a business. (pp. 10-22 to 10-25)
10. Define or describe each of the Key Words and Phrases for this assignment. (All Key Words and Phrases appear in bold print in the text and in boxes in the margins throughout this chapter.)

## Chapter 10

# Managing Loss Exposures: Risk Management

In the previous two chapters, you learned about property and liability loss exposures and the insurance policy provisions that deal with those exposures. This final chapter will help you understand that insurance is just one way of managing loss exposures.

As described in the beginning of this book, insurance is three things: a transfer system, a business, and a contract. As a transfer system, insurance is a risk management technique, but it is not the only one. Whether you know it or not, you practice risk management informally throughout your life. For instance, if you decide not to take up skiing because you are afraid of being injured, you are practicing the risk management technique of *avoidance*. If you do decide to ski, but choose to wear a helmet while skiing, you are practicing the risk management technique of *loss control*. When you accept the lift ticket from the ski resort, you can read on the back that you have accepted a form of *noninsurance transfer* in which you agree to not hold the resort responsible for any injury that you might incur. If you ski and do not have insurance against accidental injury, you are practicing the risk management technique of *retention*. Finally, if you purchase an insurance policy to cover accidental injuries, including skiing injuries, you are handling your loss exposure by purchasing *insurance*. You will learn about all of these techniques for handling loss exposures in this chapter, which introduces risk management as a formal process. Keep in mind, however, that informal risk management occurs every day in everyone's life and in every business.

Everything people or organizations do exposes them to possible accidental losses. Whenever accidental losses occur, they can create serious financial consequences for the individuals, households, or organizations that suffer the loss. Such losses can also prevent persons or organizations from achieving their goals. Identifying and finding ways to deal with these potential losses is what risk management is all about. Insurance, which cannot prevent accidental losses, works best when it is part of a well-designed risk management program tailored to the loss exposures of each insured.

**Educational Objective 1**

Identify and describe the steps in the risk management process.

# The Risk Management Process

**Risk management** is the process of making and implementing decisions to deal with loss exposures. It involves identifying loss exposures and then applying various techniques to eliminate, control, finance, or transfer those exposures.

Although it is defined in various ways, **risk management** is essentially the process of managing exposures to accidental losses. Whether those practicing risk management are company executives, individuals planning for themselves or their families, or professionals working with clients, the goal of risk management is the same: to minimize the adverse effects of loss exposures. For every risk management professional relying on computers and sophisticated systems to assist with decision making, there are hundreds who jot their solutions on scratch pads or simply note them mentally. Risk management is not just a process used by large corporations. Risk management concepts are also used, consciously or not, by small and medium-sized companies, communities, families, and individuals.

The risk management process needs specific attention in every well-managed household or organization, regardless of its nature or its size. The person who performs the risk management function differs, depending on the household or organization. The responsible person in an organization might be an employee known as the risk manager, as the director of risk management, or by some other title. In other organizations, risk management is performed in part by someone outside the firm—for example, a risk management consultant. An insurance agent or broker can assist organizations with their risk management process by helping them determine what loss exposures they have and by suggesting the types and amounts of insurance they need; however, decisions should be made by the client, not by the agent or broker. In a household, the person who performs risk management might be the primary wage earner or the person who handles the household finances. In this chapter, the term "risk manager" refers in a broad sense to anyone who is primarily responsible for risk management, regardless of title or status within the organization or household. The term "household" refers to any household unit, whether an individual, a traditional family, or individuals living together in a single household. The term "organization" refers to any business, organization, or community, whether operating as a for-profit or nonprofit organization. Risk management concepts are valid for all of these types of households and organizations.

Risk managers in households or organizations should be responsible for seeing that all the steps of the risk management process are properly performed:

1. Identifying and analyzing loss exposures
2. Examining possible risk management techniques for handling those loss exposures
3. Selecting the most appropriate risk management techniques
4. Implementing the chosen techniques in a risk management program
5. Monitoring and modifying the risk management program

Exhibit 10-1 shows the main components of each of these steps in the risk management process.

## *Step 1: Identifying and Analyzing Loss Exposures*

*Identifying* exposures to accidental losses involves developing a complete list of loss exposures and possible accidental losses that can affect a particular household or organization. *Analyzing* these loss exposures requires estimating how large the losses might be and how often they might occur to determine how these losses might interfere with the activities and objectives of the household or organization.

**Educational Objective 2**

Identify and describe various methods of identifying loss exposures.

### *Identifying Loss Exposures*

To handle *loss exposures*, a risk manager must first identify them. The key to identifying loss exposures is a thorough knowledge of how the household or organization operates. The risk manager can start with a physical inspection of the premises and then use other tools that aid in the identification process, such as loss exposure surveys and flowcharts.

***Reminder***

A *loss exposure* (or simply an *exposure*) is any condition or situation that presents the possibility of a loss.

**Major Types of Loss Exposures**

- *Property loss exposures* can lead to losses from damage to or loss of tangible or intangible assets. Property loss exposures include exposure to *net income* losses, which are decreases in revenues or increases in expenses that result from property losses.
- *Liability loss exposures* present the possibility of a claim for damages against a person or business for negligence or for other alleged wrongdoing.
- *Human and personnel loss exposures* present the possibility of a direct financial loss by causes such as death, illness, injury, or disability. When such exposures affect individuals or families, they are called *human* (or *personal*) *loss exposures.* When similar exposures affect businesses, they are called *personnel loss exposures.*

**Exhibit 10-1**
Steps in the Risk Management Process

**1. Identifying and analyzing loss exposures**

| Identifying | Analyzing |
|---|---|
| Physical inspection<br>Loss exposure survey<br>Flowchart | Loss frequency<br>Loss severity |

**2. Examining risk management techniques**

Avoidance
Loss control:
- Loss prevention
- Loss reduction

Retention
Noninsurance transfer
Insurance

**3. Selecting the most appropriate techniques**

Decisions based on financial criteria
Decisions based on informal guidelines:
- Do not retain more than you can afford to lose.
- Do not retain large exposures to save a little premium.
- Do not spend a lot of money for a little protection.
- Do not consider insurance a substitute for loss control.

**4. Implementing the chosen techniques**

Decide what should be done.
Decide who should be responsible.
Communicate risk management information.
Allocate costs of the risk management program.

**5. Monitoring and modifying the risk management program**

Continuously monitor the risk management program.
Periodically review the insurance program.
Revise the risk management program as needed.

### *Physical Inspection*

A risk manager cannot gain a clear picture of operations by sitting in an easy chair or behind a desk. The most straightforward method of identifying loss exposures is a physical inspection of all locations, operations, maintenance routines, safety practices, work processes, and other activities. Physical inspection by itself usually does not suffice, however, because the risk manager might not have sufficient knowledge of the operations to identify all exposures or to ask others the right questions to uncover all loss exposures.

### Loss Exposure Survey

A **loss exposure survey**, or checklist, is a document listing potential loss exposures that a household or an organization might face. Independent risk management consultants as well as insurance companies, agents, and brokers often design such surveys to be comprehensive enough to apply to almost any household or organization. However, a given household or organization is unlikely to face all of the loss exposures detailed in such surveys.

A **loss exposure survey** is a risk management tool in the form of a checklist or questionnaire listing potential loss exposures that a household or an organization might face.

The risk manager uses the survey to indicate areas in which the organization faces the particular loss exposures listed on the survey. In an organization, the risk manager usually discusses the items on the survey with managers, supervisors, and other employees working in various areas who can explain the details involved in the exposures the organization faces.

A loss exposure survey can be a valuable tool to help the risk manager identify the organization's loss exposures. If used appropriately, the survey also familiarizes the risk manager with all the organization's operations. The survey's major weakness is that it might omit an important exposure, especially if the organization has unique operations not included on a standard survey form. Risk managers cannot depend solely on surveys because they might miss important loss exposures. Instead, risk managers should use the survey as a guide to develop a comprehensive picture of the organization's operations and loss exposures.

Exhibit 10-2 presents a sample of questions frequently asked on loss exposure surveys for organizations. Such surveys usually group similar exposures together, such as exposures from manufacturing operations, from the sale of products, from the use of vehicles, and so forth. Similar but less extensive surveys are available (often from insurance agents, brokers, or companies) to help households identify the loss exposures they face.

### Flowchart

Risk managers can use a **flowchart** to identify specific types of loss exposures. A flowchart complements the loss exposure survey by providing a diagram of loss exposures from certain operations. As with a loss exposure survey, a flowchart is beneficial because it forces the risk manager to examine each aspect of the operation in detail.

A **flowchart** is a diagram that depicts the flow of a particular operation or set of related operations within an organization.

Flowcharts can be complex or relatively simple. Exhibit 10-3 is a simplified flowchart for a winery in California that grows its own grapes. In the case of the winery, the flowchart reveals potential bottlenecks in production. For example, the grape crusher is vitally important because production cannot continue

**Exhibit 10-2**
Sample of Questions Frequently Asked on Loss Exposure Surveys

| Yes | No | |
|---|---|---|
| ❑ | ❑ | 1. Do you have a brochure or other written material that describes your business operations or products? |
| ❑ | ❑ | 2. Is your business confined to one industry? |
| ❑ | ❑ | 3. Is your business confined to one product? |
| ❑ | ❑ | 4. Do you own buildings? |
| ❑ | ❑ | 5. Do you lease buildings *from* others? |
| ❑ | ❑ | 6. Do you lease buildings *to* others? |
| ❑ | ❑ | 7. Do you plan any new construction? |
| ❑ | ❑ | 8. Are your fixed asset values established by certified property appraisers? |
| ❑ | ❑ | 9. Do you own any vacant land? |
| ❑ | ❑ | 10. Are any properties located in potential riot or civil disturbance areas? |
| ❑ | ❑ | 11. Are any properties located in potential flood or earthquake areas? |
| ❑ | ❑ | 12. Do your properties have security alarm systems? (Fire-sprinkler discharge, burglary, smoke detection, etc.) |
| ❑ | ❑ | 13. Are there any unusual fire or explosion hazards in your business operation? (Welding, painting, woodworking, boilers or pressure vessels, etc.) |
| ❑ | ❑ | 14. Do you take a physical count of inventory at least once a year? |
| ❑ | ❑ | 15. Do you lease machinery or equipment other than automotive? |
| ❑ | ❑ | 16. Do you stockpile inventory, either raw or finished? |
| ❑ | ❑ | 17. Could you conveniently report inventory values on a monthly basis? |
| ❑ | ❑ | 18. Do you buy, sell, or have custody of goods or equipment of extremely high value? (Radium, gold, etc.) |
| ❑ | ❑ | 19. Do you use any raw stock, inventory, or equipment that requires substantial lead time to reproduce? |
| ❑ | ❑ | 20. Do you export or import? |

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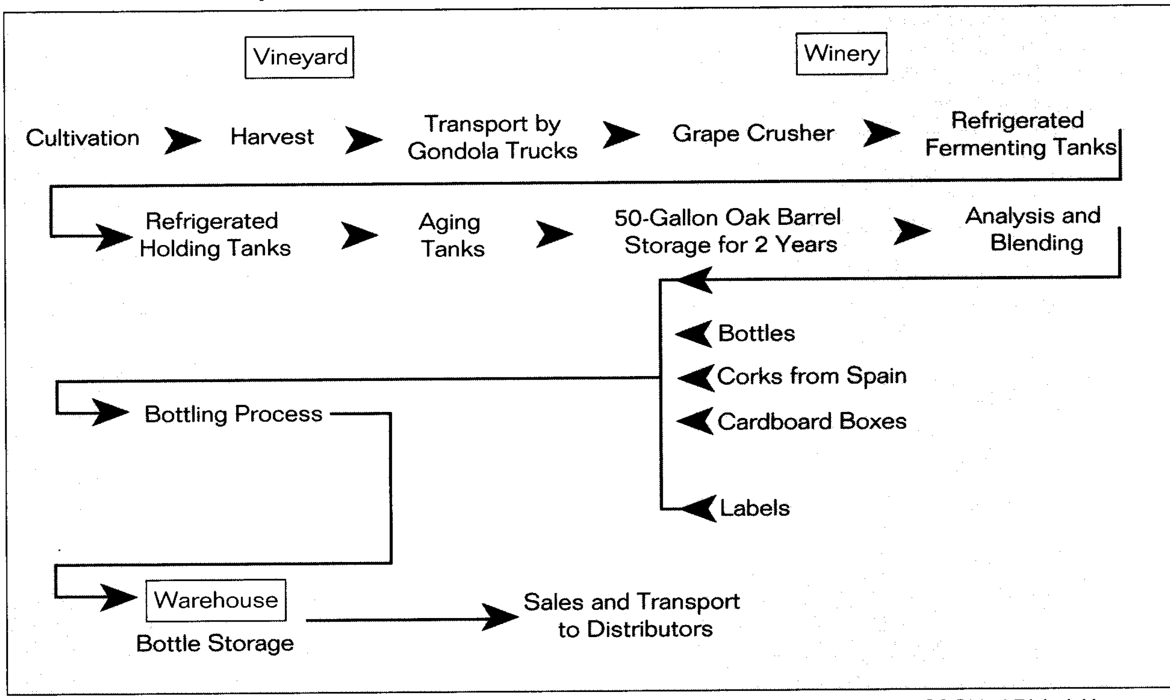
if that single piece of machinery breaks down. The bottling process is another potential source of trouble because the bottling equipment could be difficult to replace quickly if damaged or destroyed. The flowchart also illustrates certain exposures beyond the winery's control. For example, suppose the bottle or box manufacturer sustains a loss and is unable to supply the winery. Are alternative suppliers available? The flowchart by itself is useful, but to gain maximum benefit from a flowchart, a risk manager must use it in conjunction with other methods of exposure identification.

**Educational Objective 3**

Explain why measuring loss frequency and loss severity is important in analyzing loss exposures.

**Exhibit 10-3**
Flowchart for a Winery

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## Analyzing Loss Exposures

Analyzing loss exposures involves determining the financial effect of a potential loss on the household or organization. To determine the financial effect of losses, a risk manager needs to measure both the likely frequency and likely severity of those losses. This analysis enables the risk manager to give priority to the most significant exposures.

### Loss Frequency

**Loss frequency** indicates how often a loss occurs or is expected to occur. Frequent losses include abrasions and minor lacerations of employees at a manufacturing plant, minor auto accidents with a large fleet of autos, and spoilage of produce at a supermarket. Other losses, such as those caused by earthquakes, tornadoes, and hurricanes, occur much less frequently.

**Loss frequency** is a term used to indicate how often losses occur or are expected to occur. Loss frequency is used to predict the likelihood of similar losses in the future.

Accurate measurement of loss frequency is important because the proper treatment of the loss exposure often depends on how frequently the loss is expected to occur. If a particular type of loss occurs frequently, or if its frequency has been increasing in recent years, the risk manager might decide that procedures for controlling losses are necessary to decrease the frequency of losses.

**Loss severity** is a term that refers to the dollar amount of damage that results or might result from loss exposures. Loss severity is used to predict how costly future losses are likely to be.

### Loss Severity

**Loss severity** refers to the dollar amount of damage that results or might result from a loss exposure. It is much easier to gauge the potential severity of property losses than of liability losses. Most property losses have a finite value, and whether the property is partially or completely destroyed, the severity of the loss is usually calculable. The severity of liability exposures is much harder to calculate. If a paint manufacturer sells paint that produces toxic fumes when used, the severity of the potential liability loss is almost unlimited.

Likewise, the severity of the property loss from an airplane crash might equal several million dollars, a calculable amount. However, if an aircraft loaded with passengers crashes in a densely populated metropolitan area, the potential severity of the liability loss is difficult, if not impossible, to estimate accurately.

Properly estimating loss severity is also essential in order to treat the exposure to loss. The potential severity of losses is a major consideration in determining whether the household or organization should insure a particular exposure or retain all or part of the financial consequences of the loss.

**Educational Objective 4**

Identify and describe various risk management techniques.

## Step 2: Examining Risk Management Techniques

Once the identification and analysis of loss exposures is complete, the risk manager should examine all possible techniques for treating the exposures. These techniques include the following:

- Avoidance
- Loss control
- Retention
- Noninsurance transfer
- Insurance

### Avoidance

**Avoidance** is a risk management technique that eliminates a loss exposure and reduces the chance of loss to zero.

**Avoidance** is a risk management technique that eliminates the chance of a particular type of loss by either disposing of an existing loss exposure or by not assuming a new exposure. For example, a manufacturer of sports equipment might decide not to add football helmets to its line of products to avoid the possibility of large lawsuits from head injuries. A family might decide not to purchase a motor boat in order to avoid the potential property and liability exposures that accompany boat ownership.

The advantage of avoidance as a risk management technique is that the probability of loss equals zero—no doubt or uncertainty about the loss exposure exists because a loss is not possible. If this objective is not accomplished, the exposure has not been avoided. Often, discontinuing an existing activity avoids losses from *future activities*, but it does not eliminate outstanding exposures that might still arise from *past activities*. In the case of the sports equipment manufacturer, if it were already making football helmets and quit making them because of claims for injuries connected with their use, it has avoided liability loss exposures arising out of *future* helmet sales, but claims could still arise from the helmets sold in the *past*. Thus, the manufacturer has not really achieved complete avoidance of these exposures.

Avoidance has the disadvantage of sometimes being impractical and is often difficult, if not impossible, to accomplish. Suppose Suzanne is contemplating the purchase of her first automobile, but she is worried about the exposures inherent in automobile ownership. She might believe the chance of damage to the car is too great. Further, Suzanne might be unwilling to assume the chance of liability imposed by law, or perhaps she cannot afford automobile insurance. However, avoidance of these exposures might pose additional problems for Suzanne. Does she need a car for commuting to work or for other activities? If so, she will have to exchange the exposures of automobile ownership for the exposures inherent in some other type of transportation. Renting or leasing a car might be more expensive than auto ownership, and Suzanne would still be liable for any accidents she might cause. Doing totally without a car would mean traveling by public transportation, by hitchhiking, by bicycle, by motorcycle, or on foot; any of these alternatives could prove more hazardous to Suzanne than riding in her own car. Thus, Suzanne might decide that avoidance is not a feasible technique and choose to purchase a car and buy automobile insurance to cover her automobile loss exposures.

## Loss Control

**Loss control** is an effective risk management technique that involves taking steps to lower the frequency or severity of losses. Controlling loss frequency is called **loss prevention**; controlling loss severity is referred to as **loss reduction**. The loss control technique is rarely used by itself and is often most effective when used in conjunction with other risk management techniques, such as insurance.

**Loss control** is a risk management technique that attempts to decrease the frequency or severity of losses. Loss control includes *loss prevention* and *loss reduction*.

**Loss prevention** seeks to lower the *frequency* of losses, in other words, to decrease the *number* of losses.

**Loss reduction** seeks to lower the *severity* of losses that do occur, in other words, to decrease the *dollar amount* of losses.

### Loss Prevention

Risk managers often attempt to control losses by practicing loss prevention: trying to keep losses from occurring in the first place. Examples of loss prevention are commonplace:

- Keeping doors and windows locked to prevent burglaries

- Instituting a regular program of vehicle maintenance to prevent accidents due to faulty equipment

### Loss Reduction

In addition to trying to prevent losses from occurring, a risk manager might attempt to reduce the severity of losses if they do occur. Common loss reduction devices include:

- Installing a sprinkler system, which does not usually prevent fires, but which limits damage once a fire occurs.
- Posting signs in a convenience store stating that the "cashier cannot open the safe"; while the sign might not prevent a robbery from occurring, the fact that most of the money is locked in the safe can limit the severity of a potential robbery loss to the amount of money in the cash register.

#### Use of Inspection Reports in Loss Control

Insureds often use loss control measures because the insurer has recommended them. Insurers focus considerable loss control efforts on commercial insurance accounts. The loss control programs recommended by insurers are generally based on *inspection reports* prepared by the insurers' loss control representatives. An inspection report is one of the best sources of underwriting information and supplements the application.

When an underwriter receives an application for a commercial account, one of the underwriter's first tasks is often to request an inspection report from the insurance company's loss control department. A loss control engineer or representative visits the applicant's location or locations to inspect the premises and operations and submits an inspection report.

An inspection report usually has two main objectives:

- To provide a thorough description of the applicant's operation so that the underwriter can make an accurate assessment when deciding whether to accept the application for insurance.
- To provide an evaluation of the applicant's current loss control measures and recommend improvements in loss control efforts. The underwriter may require that the applicant implement the loss control recommendations in order for the application to be accepted.

**Retention** is a risk management technique that involves retaining all or part of a particular loss exposure. When the household or organization retains the exposure, it must pay for any losses resulting from the exposure with its own funds or from its own assets.

### Retention

As a risk management technique, **retention** simply means that the household or organization retains the financial consequences of a loss exposure. The entity must draw on its own financial resources to pay for part or all of the consequences of a particular loss exposure. The financial consequences of any exposure that has not been avoided or transferred are invariably retained.

Retention can be intentional, but it is often unintentional. After thoroughly analyzing the alternatives, a risk manager might decide that retention is the best means of handling a given exposure, perhaps because insurance is not available or is too expensive. As an example of such intentional retention, a risk manager might decide that purchasing collision coverage on a fleet of older vehicles is not worth the premium; he or she might therefore decide to retain the organization's exposure to collision losses and to pay for any collision losses from the company's operating funds. Unintentional retention might result from inadequate exposure identification and analysis or from incomplete evaluation of risk management techniques. For example, a restaurant might not identify its liability exposure for serving too much alcohol to a customer and therefore fail to purchase liquor liability insurance to cover this exposure.

Retention can be partial or total. An example of partial retention would be a $500 deductible on a personal auto policy or a $10,000 per building deductible on a commercial property insurance policy. An example of total retention would be a husband and wife choosing not to purchase flood insurance on their home by the lake because they think it is too expensive. They are thus totally retaining their exposure to flood losses.

Retention is usually used in combination with other risk management techniques, particularly loss control and insurance. A deductible in a business auto policy is an example of the combination of retention and insurance. If the risk manager also implements a driver safety program to lower the frequency of corporate auto accidents, loss control, retention, and insurance combine to treat the exposure economically.

### *Noninsurance Transfer*

Business organizations often treat loss exposures by transferring the potential financial consequences of loss to another party. When the other party is *not* an insurance company, this method of treating loss exposures is called **noninsurance transfer**. For example, the landlord of a commercial building might wish to transfer the liability exposure arising out of activities of a tenant. The landlord accomplishes this transfer by having the tenant sign a *hold harmless agreement*. The agreement can be either a separate contract or a provision included in the lease. A hold harmless agreement states that one party (in this case, the tenant) agrees to hold the other party (the landlord) harmless, or not legally responsible, for any liability arising from the tenant's use of the premises. Since there is a possibility of members of the public sustaining an injury on the rented property, the landlord has transferred this liability exposure to the tenant, who will be responsible for any such loss.

A **noninsurance transfer** is a risk management technique in which one party transfers the potential financial consequences of a particular loss exposure to another party that is not an insurance company.

**Reminder**

A *hold harmless agreement* is a contractual provision that obligates one party to assume the legal liability of another party.

### Insurance

In addition to other techniques for handling loss exposures, households and small businesses depend heavily on insurance. Most medium-sized and large corporations also rely on insurance as a major component of their risk management programs, but they might be less dependent on insurance and employ other risk management techniques more systematically than households and small businesses.

Even the largest corporations face exposures to loss that they simply cannot handle in any other way as economically as through the purchase of insurance. No viable alternative exists for highly unpredictable loss exposures that could result in catastrophic financial consequences. Major corporations might use large retention amounts (deductibles or self-insurance) and purchase insurance policies to provide coverage above these amounts to protect them against large losses.

By working closely with the organization's insurance agent or broker, a risk manager can develop an insurance program tailored to the company's needs and coordinate the insurance program with the techniques of avoidance, loss control, retention, and noninsurance transfer to form a complete risk management program.

Exhibit 10-4 lists the various risk management techniques, explains what each technique does, and gives an example of each.

**Educational Objective 5**

Describe the financial criteria and the guidelines for selecting the risk management techniques that are most appropriate in a given situation.

## Step 3: Selecting the Most Appropriate Risk Management Techniques

If it were possible to predict accidental losses accurately, selecting risk management techniques would be easy: prevent or avoid the losses that are most likely to happen and buy insurance against the losses that cannot be prevented or avoided. However, because no one can predict accidental losses with such accuracy, choices of risk management techniques must be based on forecasts of expected losses—where they are most likely to happen, how often they are likely to occur, and how large they will probably be. No one can know in advance which risk management techniques will be the best—risk managers can only make decisions about the techniques that appear to be the most appropriate.

Business organizations that are accustomed to reaching decisions based on expected profits or other financial criteria will probably use these same financial standards to select the most promising risk management techniques. Organizations that are less financially oriented are more likely to apply less formal guidelines to choose risk management techniques.

**Exhibit 10-4**
Risk Management Techniques

| Technique | What the Technique Does | Example |
|---|---|---|
| Avoidance | Eliminates the chance of a particular type of loss by either disposing of an existing loss exposure or by not assuming a new exposure | A family decides not to purchase a boat and therefore avoids the property and liability loss exposures associated with boat ownership. |
| Loss Control | Lowers frequency and/or severity of losses | |
| 1. Loss prevention | Lowers loss *frequency* (number of losses) | A business installs a burglar alarm system in an attempt to prevent burglaries. |
| 2. Loss reduction | Lowers loss *severity* (dollar amount of losses) | A business installs a sprinkler system to reduce the amount of fire damage from potential fires. |
| Retention | Retains all or part of a loss exposure (intentionally or unintentionally), which means that losses must be paid for with available funds or other assets | A business decides not to purchase collision coverage for its fleet of vehicles and sets aside its own funds to pay for possible collision losses. |
| Noninsurance transfer | Transfers potential financial consequences of a loss exposure from one party to another party that is not an insurance company | In a lease, a landlord transfers the liability exposures of a rented building to the tenant. |
| Insurance | Transfers financial consequences of specified losses from one party (the insured) to an insurance company in exchange for a specified fee (premium) | A family purchases homeowners and personal auto policies from an insurance company. |

### *Decisions Based on Financial Criteria*

Financial management standards typically call for making those choices that promise to increase profits and/or operating efficiency. Risk management decisions can be based on the same criteria. When an organization undertakes an activity to achieve profit goals or other objectives, it also assumes the exposures to accidental loss that are inherent in that activity. How the organization deals with those loss exposures affects the profits or output from the activity. By forecasting how a particular risk management decision will affect profits or output, an organization can project which risk management choice is likely to be the most financially beneficial. For example, a corporation might analyze its financial position and decide that it does not want any retained loss exposures to affect annual corporate earnings by more than five cents per share of stock. If the corporation has one hundred million shares outstanding, the risk management department can retain up to $5 million for all exposures in a fiscal year. The risk management department makes its retention decisions for the coming year based on this strategy of protecting corporate earnings.

## Decisions Based on Informal Guidelines

Most households and small organizations follow less formal guidelines in selecting risk management techniques.

### Do Not Retain More Than You Can Afford To Lose

This rule sets the upper limit on the proper retention level; the amount that a household or organization can afford to lose depends on its financial situation. For example, if a family has only $500 in its savings account and lives from paycheck to paycheck, it probably cannot afford to carry a $1,000 deductible on either its homeowners or personal automobile policies. The family will probably choose to carry whatever minimum deductibles the insurer offers, despite the fact that the family could save premium dollars by choosing a higher deductible. The family simply cannot afford to lose more than a few hundred dollars for any loss.

### Do Not Retain Large Exposures To Save a Little Premium

A risk manager should not retain a large exposure to loss, such as auto liability, in order to save a small amount of insurance premium. Depending on market conditions, certain types of liability insurance coverage, such as some umbrella policies (designed to cover large liability losses), can cost relatively little because the potential frequency of large liability losses is low.

Exposures with the potential of low frequency but high severity should generally be insured because they are highly unpredictable. For example, the probability of a building suffering a total fire loss is low because total fire losses happen infrequently; however, if a multi-million-dollar commercial building does burn to the ground, the severity of the loss would be great. One such loss would cost the organization many times a year's insurance premium, so the organization should fully insure the building.

### Do Not Spend a Lot of Money for a Little Protection

Risk managers should spend insurance dollars where they will do the most good. Spending a relatively high premium to buy a little protection usually amounts to "trading dollars" with the insurance company. If the exposure is almost certain to lead to a loss, the insurer must charge a premium close to the expected cost of the loss plus expenses. It is better to retain exposures of this type because the household or organization could absorb the cost of a loss almost as easily as the cost of the insurance. For loss exposures with high frequency and low severity, retention and loss control are usually the best alternatives. For example, the owner of a candy shop might decide not to purchase crime insurance on its stock of candy because it knows that customers and employees often steal small amounts of candy. The severity of these small thefts is low even though the frequency is high. The probability of a burglar stealing large amounts of candy is also low (the burglar would probably go instead for the money in the safe or cash register). The cost of insurance against theft of the candy would probably be higher than the frequent small losses the shop incurs, so the shop owner's decision not to purchase theft insurance for the candy is probably a good one.

#### *Do Not Consider Insurance a Substitute for Loss Control*

A risk manager might evaluate a particular exposure, such as automobile collisions, and discover that the frequency of accidents has been increasing in recent years. If the company has a $1,000 collision deductible for each accident, the risk manager might decide that something must be done to reduce the organization's total annual retention for auto accidents.

One approach might be to lower the deductible to $500 so that the company retains less on each accident. This step would not solve the real problem, however, which is the increase in loss frequency. The insurance cost increases with the lower deductible, and the increase in loss frequency is likely to continue. In this case, the risk manager would be using the purchase of insurance in lieu of loss control.

Instead, the company could implement a loss control program to prevent accidents from occurring. This program could include more careful screening of company drivers, periodically reviewing drivers' motor vehicle records, training employees in safe driving practices, ensuring vehicle safety through regular vehicle maintenance, and implementing other loss control activities to reduce the frequency of collisions. If the program works and fewer accidents occur, the organization's overall retention from absorbing deductibles decreases, although the cost of the loss control program must be considered. Future insurance premiums might be lower as well, because the insurer might give a premium credit for the improved accident record.

When insurance takes the place of loss control, the insured simply passes the cost of absorbing additional losses to the insurance company and is once again trading dollars with the insurer. It might be more economical to spend dollars on a loss control program that will prevent and reduce losses and lower the long-term cost of insurance and the risk management program.

**Educational Objective 6**

Describe procedures for implementing risk management techniques.

## Step 4: Implementing the Chosen Risk Management Techniques

Implementing the risk management techniques that an organization has chosen requires that the risk manager make decisions concerning:

- What should be done
- Who should be responsible
- How to communicate risk management information
- How to allocate the costs of the program

### Deciding What Should Be Done

Once the risk manager has decided what risk management techniques to use, he or she must work out the details of how to implement them. For example, Helen, the risk manager of Goodfood Supermarket, has decided that the store needs a sprinkler system, but she must now decide how much Goodfood can afford to spend on the system, what kind of system should be installed, and which contractor should install it. She might also need to check on local water supply and building permits and decide what is necessary to be in compliance with local ordinances. Since the top management of Goodfood will certainly want to see that customer disruption at the store is kept to a minimum, Helen must decide how to accomplish this objective. She must also consult with Goodfood's insurance agent to make sure that proper property and liability coverages are in place during and after the installation of the system and that an insurance credit is given for the sprinkler system. Helen must take these considerations and many others into account before deciding exactly how to implement the loss control technique she has chosen. She must also consult with the necessary people both inside and outside the business to help make these decisions.

### Deciding Who Should Be Responsible

The risk manager does not usually have complete authority to implement risk management techniques and must depend on others to implement the program based on the risk manager's advice. The risk manager must seek authority for the risk management program from senior management. Larger organizations might have a written risk management statement and a risk management manual outlining guidelines, procedures, and authority for implementing risk management techniques. In smaller organizations and in households, the person making risk management decisions is often the person implementing the program because that person is the organization's owner or the household's primary wage earner.

### Communicating Risk Management Information

Any risk management program must include a communications network. Risk management departments of large organizations generally rely on a risk management manual to inform others of how to identify new exposures, what risk management techniques are currently in place, how to report insurance claims, and other important information. The communication process must be two-way. Management and other employees must funnel information to the risk manager so that he or she can adjust the program for new exposures and evaluate the effectiveness of the techniques used.

### Allocating Costs of the Risk Management Program

Also important is the allocation of risk management costs. When numerous operations or locations exist, the costs of loss control, retention, noninsurance transfers, and insurance, as well as the expenses of the risk management department, must be spread appropriately across all departments and locations.

In small organizations or within households, allocating costs is also feasible. For example, an employee of a small business might be required to pay the deductible arising from damage she caused to a company car, or a teenager might have to pay to fix a neighbor's window that he accidentally broke.

**Educational Objective 7**

Describe procedures for monitoring and modifying a risk management program.

## Step 5: Monitoring and Modifying the Risk Management Program

Monitoring the risk management program is an ongoing activity that a risk manager must carefully perform. Because the needs of all households and organizations change over time, a risk management program should not become outdated. Monitoring the program ranges from handling routine matters, such as updating fleets of vehicles, to making complex decisions concerning new activities to initiate or avoid.

Each year the household or organization should thoroughly review its insurance program with its agent or broker. Because decisions regarding insurance are usually interrelated with other risk management techniques, any change in this area of the risk management program necessarily affects the other areas.

In effect, the last step in the risk management program is really a return to the first. In order to monitor and modify the risk management program, the risk manager must periodically identify and analyze new and existing loss exposures and then reexamine, select, and implement appropriate risk management techniques. Thus, the process of monitoring and modifying the risk management program begins the risk management process once again.

**Educational Objective 8**

Explain how each of the following can benefit from sound risk management:

a. Businesses

b. Individuals and families

c. Society

d. Insurers

# Benefits of Risk Management

Few businesses, individuals, or families are financially able to retain all their loss exposures and must transfer much of the financial burden of their potential losses. Therefore, insurance is an essential part of almost all sound risk management programs. However, insurance must be considered in its proper place in a well-balanced program of risk management that also includes other risk management techniques. Risk management has many advantages over merely buying insurance. These advantages benefit businesses, individuals, families, and society, as well as insurers.

## Benefits of Risk Management to Businesses

Making insurance part of an overall risk management program instead of relying solely on insurance provides many benefits to an organization, including:

- Improved access to affordable insurance
- Increased opportunities
- Achievement of business goals

### Improved Access to Affordable Insurance

Insurers often prefer to insure an organization that practices good risk management rather than one that relies only on insurance to protect it against the financial consequences of accidental losses. An insured who combines a sound insurance program along with the risk management techniques of avoidance, loss control, retention, and noninsurance transfer usually has fewer and smaller losses than do other insureds. Therefore, insurers are likely to generate better loss ratios and underwriting results by insuring policyholders that have sound risk management programs. Consequently, such insureds are often able to obtain broader coverage at lower premiums than are insureds that do not practice risk management.

### Increased Opportunities

The fear of uncertain future losses tends to make many business owners and executives reluctant to undertake activities they consider too risky. This reluctance deprives an organization of the benefits that could be derived from undertaking certain activities. A business that can worry less about its loss exposures because of effective risk management is financially and psychologically better prepared to seek other opportunities that might increase its profits. For example, if a business feels secure in the way it has managed its present property and liability loss exposures, it might consider more favorably a proposal to manufacture a new product or to expand its present sales territory.

### Achievement of Business Goals

Risk management makes it possible for a business to achieve its business and financial goals, such as stability, growth, and continuity, in a cost-effective manner and can thus help improve profitability. Profits can be increased directly by reducing expenses. For example, a firm might reduce its insurance costs because the risk manager chooses to retain a loss exposure instead of insuring it.

## Benefits of Risk Management to Individuals and Families

Like businesses, individuals and families benefit in several ways from effective risk management:

- *Coping more effectively with financial disasters* that might otherwise cause a greatly reduced standard of living, personal bankruptcy, family discord, or even family breakups.
- *Enjoying greater peace of mind* from knowing that their loss exposures are under control. They have less physical and mental strain and can become more involved in other activities.
- *Reducing expenses* by handling loss exposures in the most economical fashion.
- *Taking more chances and making more aggressive decisions* on ventures with high profit potential such as investing in the stock market, changing careers, or starting a part-time business.
- *Continuing activities following an accident or other loss*, and thus reducing inconvenience.
- *Improving image in the community* by successfully preparing for and handing adversity and satisfying to some degree a sense of social responsibility.

## Benefits of Risk Management to Society

By benefiting themselves through effective risk management, businesses, individuals, and families also benefit society in various ways:

- *Stimulating economic growth* because fewer and less costly losses mean that more funds are available for other uses, such as investment, which can spur economic growth
- *Reducing the number of persons dependent on society for support* (and thus increasing the number of taxpayers) because businesses and families plan for financial crises through risk management
- *Causing fewer disruptions in the economic and social environment* because companies and families practice risk management

## Benefits of Risk Management to Insurers

From an insurer's point of view, risk management is beneficial in many ways:

- *Creating a positive effect on an insurer's underwriting results, loss ratio, and overall profitability* because insureds who practice sound risk management tend to experience fewer or less severe insured losses than those who do not.
- *Providing more thoughtful consumers of insurance* because those who practice risk management are likely to combine insurance with other techniques for handling loss exposures.
- *Creating innovative products and competitive prices and services* because professional risk managers seek to get the most for their insurance dollars and are often willing to pay higher premiums in exchange for greater insurance value. As a result, these risk managers may encourage insurers to be more innovative and competitive in the insurance products, prices, and services they provide.
- *Obtaining the respect and business of risk managers and companies* that have a risk management program if the insurers and their producers are knowledgeable about risk management.

**Educational Objective 9**

In a given case, recommend and justify risk management techniques appropriate for an individual, a family, or a business.

# An Example of a Risk Management Program

An example of a simple risk management program might help to clarify the risk management process. To show that a risk management program need not be complicated, this example applies the risk management process to a family situation. Keep in mind, however, that risk management programs for organizations can be either simple or sophisticated. These programs become more complex as organizations increase in size and their loss exposures become more extensive and complicated.

A typical household faces many loss exposures, such as various property and liability exposures from home and automobile ownership. For example, Tony and Maria Garcia both work outside their home, and they have three school-aged children. The Garcias own two automobiles and a home with a pool, have a modest savings account, and have made some investments in the stock market. After attending a seminar at his company on risk management, Tony has decided that the family should initiate a risk management program of its own. Remembering the steps in the risk management program, Tony knows that the family must:

1. Identify and analyze its loss exposures
2. Examine various risk management techniques
3. Select techniques appropriate for the family
4. Implement the chosen techniques
5. Monitor and modify its risk management program

Tony and Maria started the process of identifying loss exposures by listing the exposures they could think of and then inspecting their home, looking for other exposures they had not yet considered. For example, when Tony spotted his daughter's field hockey stick, he realized that they have a liability exposure arising from the children's various athletic activities. His son's saxophone in his bedroom reminded Tony that the saxophone was not specifically insured and that they did not have the funds readily available to replace it if it were stolen or damaged. Tony gulped when he viewed their swimming pool full of neighborhood children, and realized that they needed higher liability limits than their current homeowners policy provided. After a physical inspection of their home and property, Maria called their insurance agent and obtained a household inventory form that they used to inventory their household contents and other possessions to determine their property loss exposures. The agent also sent them a survey form to complete, which they used to list potential liability exposures for the family. Maria and Tony then analyzed all the loss exposures they had identified and attempted to determine which ones could cause the most frequent or most severe losses.

After identifying and analyzing their property and liability exposures, the Garcias next step was to examine risk management techniques. Tony knew from the seminar that possible techniques included avoidance, loss control, noninsurance transfer, and retention, as well as insurance. The Garcias had been thinking of buying a new home near the local river, but Tony and Maria were afraid the exposure to flooding was too great; therefore, they decided not to buy the house and thus used avoidance to eliminate this exposure. In an attempt to practice sound loss control, they decided to install deadbolt locks on all their doors and locks on all their windows; they also installed smoke detectors in several places in their home, and they are contemplating installing a burglar alarm system if they can find one that is both effective and within the family budget. Tony and Maria explored noninsurance transfer by checking into leasing a car, but they found that they would still be responsible for all liability connected with the use of the vehicle and would still have to purchase insurance, so they decided this was not a good risk management technique for them.

Since the Garcias do not have much disposable income after they pay their mortgage, car payments, and other household bills each month, they know that they must rely heavily on insurance to cover their loss exposures. Although they cannot afford to retain much of their exposure, they did raise the deductibles on both their homeowners and personal auto policies from $250 to $500, thereby saving them some money on their premiums. They decided not to specifically insure their son's saxophone because their homeowners policy already covered it for fire, theft, lightning, and other causes of loss. They decided to apply the retention technique if their son simply lost or damaged the saxophone; in other words, they would just replace the saxophone from their personal funds, make their son earn money to replace it, or not buy a new one. They decided to purchase an umbrella policy to cover large liability losses such as those that might arise from the children's sporting activities or the pool exposure. The increased deductibles and retaining the property loss exposures for the saxophone were about all the retention Tony and Maria thought they could handle. Thus, as in most households, insurance will play a dominant role in treating loss exposures for the Garcia family.

By deciding not to purchase the house near the river, installing locks and smoke detectors, purchasing umbrella insurance, and deciding to retain some exposures, the Garcias effectively completed the third and fourth steps in the risk management process: selecting and implementing their risk management techniques.

The last step in the Garcias' risk management program is periodically monitoring and modifying the program. For a family, an annual review of their situation is probably sufficient unless their circumstances change significantly. An ideal time for the Garcias to do another physical inspection and inventory would be at the renewal of their homeowners policy or if either Tony or Maria changes jobs, receives a large bonus, has a salary increase, or purchases any type of high-valued property. When

Tony first began to monitor their risk management program, he realized that they had neglected to consider their human loss exposures, such as death, illness, injury, or unemployment. Tony and Maria immediately took steps to modify their risk management program to include their human loss exposures and began the process of exposure identification and analysis all over again to include those important exposures.

**Educational Objective 10**

Define or describe each of the Key Words and Phrases for this assignment. (All Key Words and Phrases appear in bold print in the text and in boxes in the margins throughout this chapter.)

# Summary

Insurance is one of the fundamental techniques of risk management, but it is not the only one. Risk management can enable a person, family, or business to handle exposures to accidental losses effectively. Risk management is the process of making and carrying out decisions to minimize the adverse effects of accidental losses and involves the following steps:

1. Identifying and analyzing loss exposures
2. Examining possible risk management techniques for handling those loss exposures
3. Selecting the most appropriate techniques
4. Implementing the chosen techniques in a risk management program
5. Monitoring and modifying the risk management program

A risk manager, who is the person responsible for the risk management process, can conduct a physical inspection to identify loss exposures and can also use tools such as loss exposure surveys and flowcharts. Analyzing loss exposures includes measuring loss frequency (how often losses occur) and loss severity (the dollar amount of losses).

After identifying and analyzing all loss exposures, the risk manager must examine possible risk management techniques, which are methods of handling the loss exposures. These techniques include:

- Avoidance
- Loss control (which includes both loss prevention and loss reduction)
- Retention
- Noninsurance transfer
- Insurance

Selecting the most appropriate techniques involves making decisions based on financial criteria as well as informal guidelines. Implementing the chosen techniques calls for making decisions on what should be done, who should be responsible, how to communicate risk management information, and how to allocate costs of the risk management program.

The final step in the process of risk management is actually a return to the first. To properly monitor and modify the program, the risk manager must go back to step one and once again begin to identify and analyze new and existing loss exposures. Thus, the process begins anew.

Risk management has many advantages over merely buying insurance. These advantages benefit businesses, individuals, families, society, and insurers in various ways. Although formal risk management programs are used primarily by business organizations, individuals and families can also benefit from applying risk management to their exposures to accidental losses. While a risk management program for a large business can be complex and sophisticated, a risk management program for a family can be simple and informal and is well worth the time and effort to implement.