

# Chapter 4

## Risk Control

The third step in the risk management process is examining the feasibility of risk management alternatives. This step facilitates the subsequent steps of selecting and implementing the appropriate risk management techniques. To make these selection decisions, an insurance or risk management professional must determine which risk management techniques most effectively address an organization's loss exposures. All risk management techniques fall into one of two categories: risk control or risk financing. The focus of this chapter is on risk control.

An insurance or risk management professional uses risk control techniques to reduce loss frequency and/or loss severity or to make losses more predictable. The six risk control techniques are avoidance, loss prevention, loss reduction, separation, duplication, and diversification. Multiple risk control measures may be used to implement a given technique.

Risk control goals are designed to support the risk management program goals, which in turn support the individual's or organization's goals. To that end, risk control techniques must be effective and efficient, comply with legal requirements, assist in promoting life safety, and that ensure that a business can retain continuity during and immediately following a loss.

Not every risk control technique can successfully be applied to every type of loss exposure. Therefore, each loss exposure must be evaluated to determine which risk control techniques will best help an organization achieve its goals. However, many loss exposures within a given category—property, liability, personnel, or net income—warrant application of the same risk control techniques.

### RISK CONTROL TECHNIQUES

**Risk control** is a conscious act or decision not to act that reduces the frequency and/or severity of losses or makes losses more predictable. Risk control techniques can be classified into one of the following six broad categories:

1. Avoidance
2. Loss prevention
3. Loss reduction
4. Separation
5. Duplication
6. Diversification

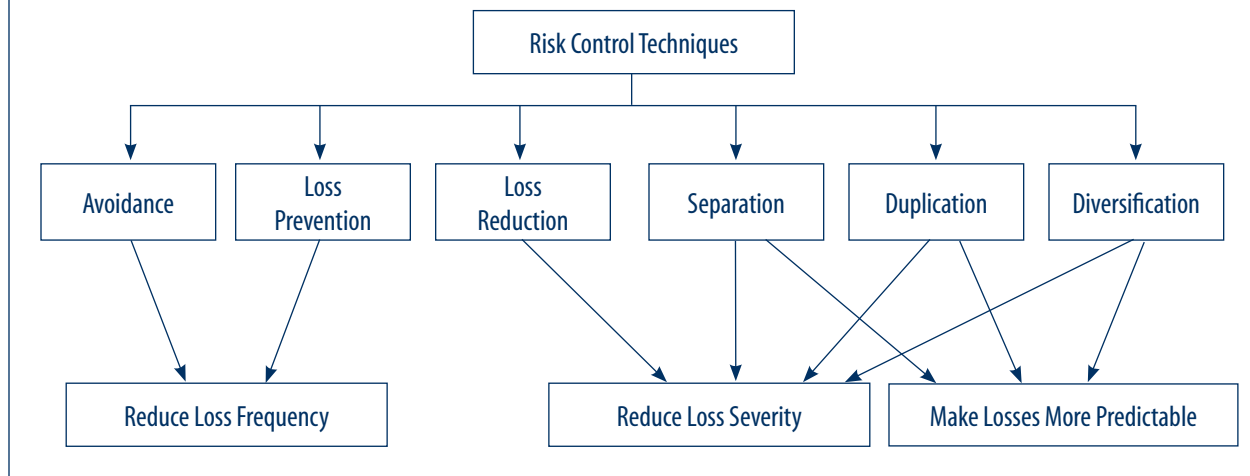
Each of these six categories aims to reduce either loss frequency or severity, or make losses more predictable, as shown in Exhibit 4-1.

#### **Risk control**

A conscious act or decision not to act that reduces the frequency and/or severity of losses or makes losses more predictable.

## EXHIBIT 4-1

## Target of Risk Control Techniques



## Avoidance

### Avoidance

A risk control technique that involves ceasing or never undertaking an activity so that the possibility of a future loss occurring from that activity is eliminated.

The most effective way of managing any loss exposure is to avoid the exposure completely. If a loss exposure has successfully been avoided, then the probability of loss from that loss exposure is zero. **Avoidance** is a risk control technique that involves ceasing or never undertaking an activity so that the possibility of a future loss occurring from that activity is eliminated. The aim of avoidance is not just to reduce loss frequency, but to eliminate any possibility of loss. Avoidance should be considered when the expected value of the losses from an activity outweighs the expected benefits of that activity. For example, a toy manufacturer might decide not to produce a particular toy because the potential cost of products liability claims would outweigh the expected revenue from sales, no matter how cautious the manufacturer might be in producing and marketing the toy.

Avoidance can either be proactive or reactive. Proactive avoidance seeks to avoid a loss exposure before it exists, such as when a medical student chooses not to become an obstetrician because he or she wants to avoid the large professional liability (malpractice) claims associated with that specialty. Reactive avoidance seeks to eliminate a loss exposure that already exists, such as when manufacturers of hand-held hair dryers stopped using asbestos insulation in their dryers once the cancer-causing properties of asbestos became known. Reactive avoidance, that is, discontinuing an existing activity, avoids loss exposures from future activities but does not eliminate loss exposures from past activities. For example, the hair dryer manufacturer may avoid claims from consumers who purchase the hair dryers produced after asbestos is no longer used, but would remain legally liable for associated harm suffered by prior consumers.

Because loss exposures do not exist in a vacuum, avoiding one loss exposure can create or enhance another. For example if an individual is concerned about dying in an airplane crash, he or she can choose not to travel by air. However, by avoiding air travel, the individual increases the loss exposure to injury or death from the other means of transport chosen in its place.

Complete avoidance is not the most common risk control technique and is typically neither feasible nor desirable. Loss exposures arise from activities that are essential to individuals and to organizations. Therefore, it is not possible to avoid these core activities. For instance, if a manufacturer's principle product is motorcycle safety helmets, it could not stop selling them in order to avoid liability loss exposures. Similarly, an organization cannot decline to occupy office space in order to avoid property loss exposures. Nonfinancial concerns also can render avoidance impossible. For example, a municipality cannot arbitrarily stop providing police protection or water to its inhabitants in order to avoid the associated liability loss exposures.

## Loss Prevention

**Loss prevention** is a risk control technique that reduces the frequency of a particular loss. For instance, pressure relief valves on a boiler are intended to prevent explosions by keeping the pressure in the boiler from reaching an unsafe level. The valve is a type of loss prevention, not avoidance, because a boiler explosion is still possible, just not as likely.

To illustrate a loss prevention measure, consider a hypothetical manufacturing company, Etchley Manufacturing (Etchley). Etchley has 500 employees working at a single plant. The workers' compensation loss history for this plant shows a significant number of back injuries. Etchley is considering hiring a back injury consultant to host a series of educational seminars for its employees. The consultant estimates that, based on the results of his past seminar series, Etchley will see a 20 percent reduction in the frequency of back injuries. The chart in Exhibit 4-2 shows the frequency distributions of back injuries both with and without the educational seminar in order to demonstrate the estimated effect of this loss prevention measure. The frequency distribution without the educational seminar has a mean of 30, a standard deviation of 5.48 and a coefficient of variation of 0.1827. The frequency distribution with the educational seminar has a lower mean of 24, a lower standard deviation of 4.20, and a lower coefficient of variation of 0.1750. Based on these figures, not only would the consultant's educational seminar reduce the expected frequency of back injuries, it would also reduce their variability from year to year, which would allow Etchley to budget more effectively for those injuries that do occur.

### Loss prevention

A risk control technique that reduces the frequency of a particular loss.