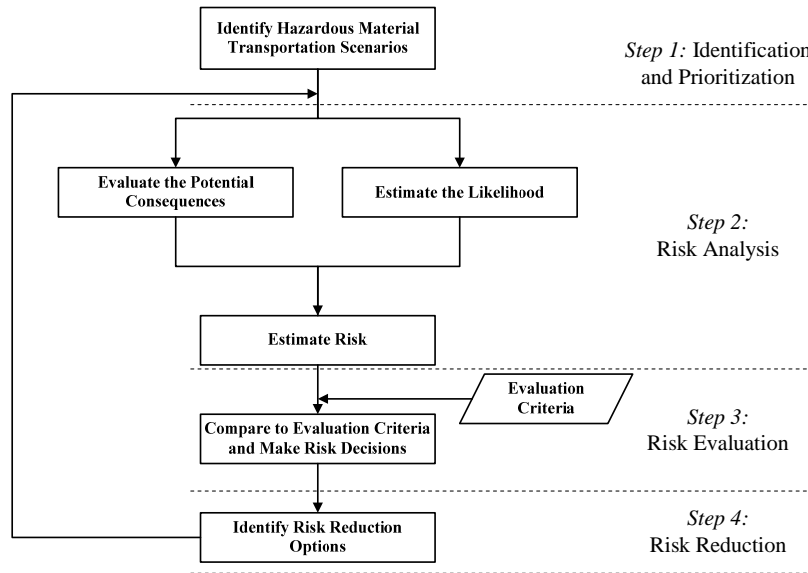


**Figure 3.1** Risk Assessment Steps

In addition to an overall description of risk assessment fundamentals, this chapter details the identification and prioritization process used to select scenarios for a more detailed risk analysis (Step 1). Risks identified as “lower priority” during the prioritization process should not be disregarded or ignored, but should be managed as part of an overall transportation safety and security management system. This management system for safety and security should include the primary management system program elements described in Chapter 2.

For issues escalated for further assessment (Step 2), a risk-based approach can help ensure that estimates of potential consequences, likelihood, and risk are evaluated consistently using standardized and accepted techniques. Using this approach, risks are evaluated using approved risk criteria and decisions are made using an objective approach (Step 3). While the goal is to make risk-informed decisions, to imply that companies will make decisions solely based on risk is unrealistic, as there may be other business, operational, or security trade-offs, or the company may decide to accept a slightly higher risk for the short term while long-term risk reduction strategies are put into place. This approach can be documented and applied consistently within or across an organization and includes the process for selecting risk mitigation options to achieve a desired level of risk reduction (Step 4).

Risk assessment of hazardous material transportation can ultimately lead to more informed decisions since the process enables a better understanding of the following items:

- Features of various modes of transport
- Types of incidents that might occur