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## **Identifying System-Level Risk Exposure**

Instructor: Mark Duntemann  
Duration: One-Day  
ISA CEU's 7

A critical element of the ISO's risk management process is identifying an organization's (private or public) risk exposure. Identifying risk exposure from the trees being managed allows an organization to develop policies that appropriately address the risks identified. The initial sessions in this module detail a process to identify the range of risk exposures and priorities associated with publicly managed trees. The final sessions of the day provide guidance on determining risk thresholds and whether ALARP has been achieved.

### **8:30 Risk Exposure Related to Managing Public Trees**

A common understanding within arboriculture and urban forestry is that the goal of a tree risk management policy is the reduction of tree-related events. It is not. Risk reduction to the organization is the overall goal. This is achieved by managing uncertainty. An outcome of this process may be the reduction of tree-related events. This opening discussion on risk exposure details this poorly understood concept and how a shift in understanding how risk is managed is required.

### **9:30 The Risk Analysis and Types of Risk an Organization can Experience**

A risk analysis provides the foundation for understanding an organization's risk exposure from the trees being managed. During this analysis, an organization assesses its sensitivity to different forms of risk. These can include financial loss, physical harm, property damage, or the loss of integrity.

### **10:30 Break**

### **10:45 Metrics for Determining Risk Exposure**

Four metrics are typically present for determining an organization's risk exposure. They include the tree resource, the staff resource, history of past events and operational incidences. Each will be discussed in detail during this session using lecture, case studies and group exercises. The integration of information from each informs on an overall understanding of risk exposure.

### **12:00 Lunch**

### **12:45 Metrics for Determining Risk Exposure (cont'd)**

The morning session will continue in the afternoon with group exercises.

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### **:30 Risk Exposure Analysis Outcomes**

The purpose of the risk exposure analysis is to identify the organization's current risk exposure and current risk threshold. This exposure is informed by past and current operational programs, resources and funding. The outcome of the analysis establishes a baseline for assessing whether the organization has achieved As Low as Reasonably Practical or are there areas for improvement.

### **2:30 Identifying an Organization's Risk Threshold.**

Because risk can never be eliminated if the benefits from trees are to be enjoyed or realized, some level of risk must be accepted. Identifying this risk threshold is a significant outcome of the risk exposure analysis and a necessary exercise for any organization managing trees.

### **3:30 Risk Treatment**

This concluding session provides insight on how an organization can enact policies to refine its program to achieve a quantifiably lower risk threshold. The issue of diminishing returns will be discussed. To achieve a lower risk threshold, a disproportionate amount of resources may be expended. In some cases, risk may not be quantifiably reduced, and the potential exists that an increase in risk from an unforeseen place may occur. The concluding comments discuss a template for monitoring risk metrics over time.

### **4:30 End of Day**