



**RELIABILITY FIRST**

# Making the Enforcement Process Work for You

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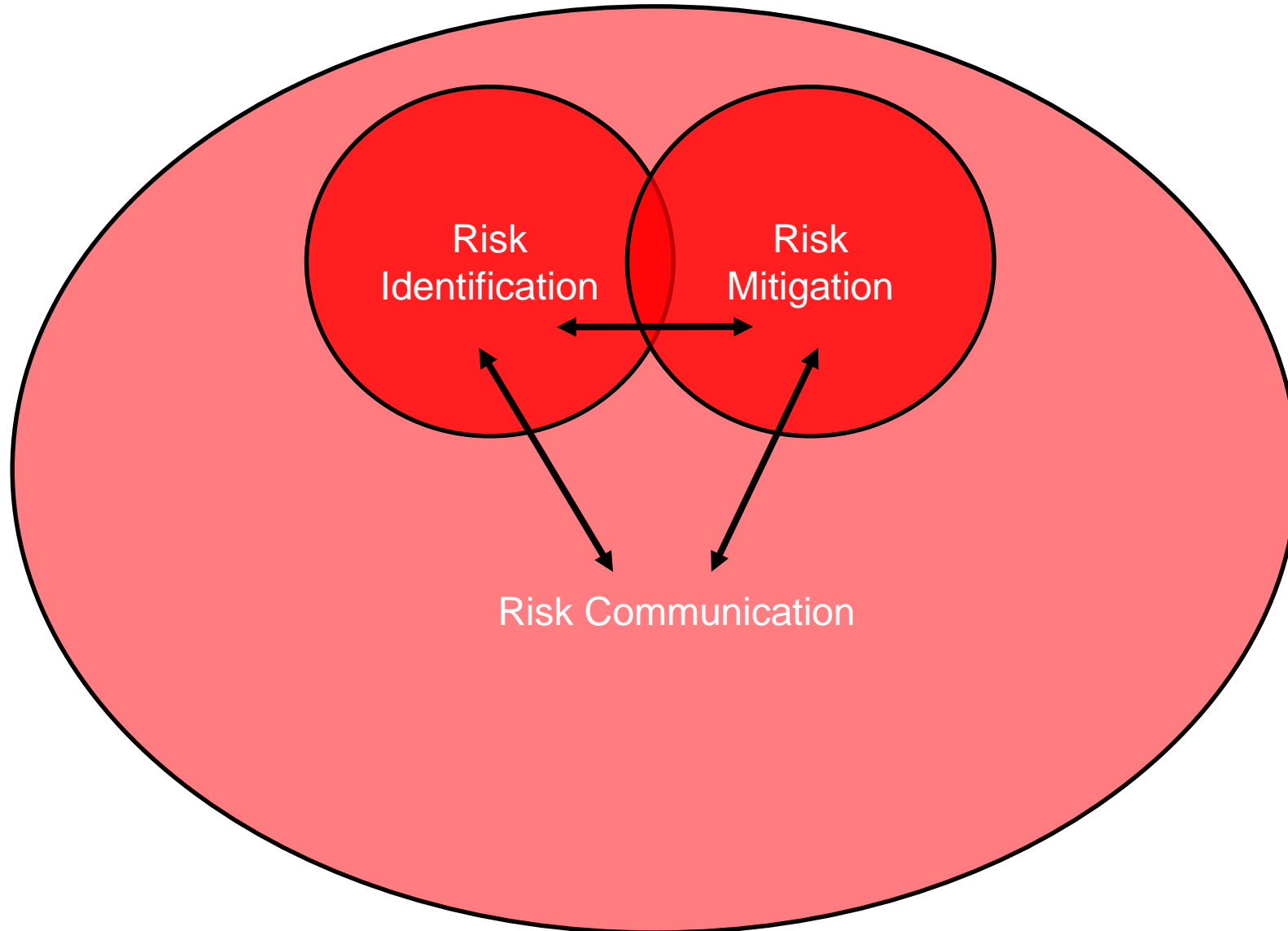


# Focus Questions

- **How Does RF Approach Risk?**
- **What Types of Factors Can Affect the Disposition of Potential Noncompliances?**
- **How Can the Quality of Information Contained in Self-Reports and Mitigation Plans Impact the Enforcement Process?**
- **What Resources are Available to Help Me Navigate the Enforcement Process Successfully?**



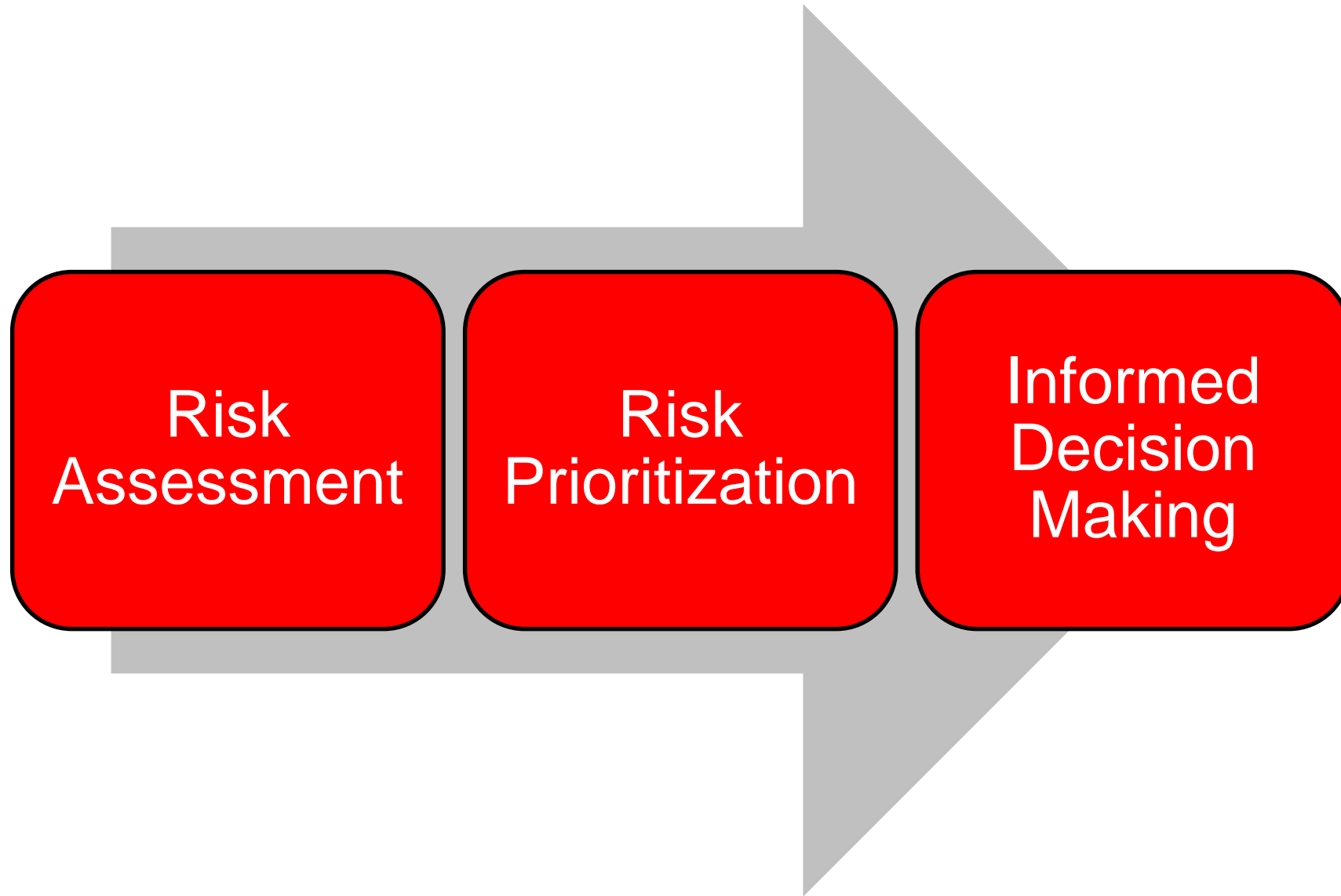
# RF's Risk Based Approach



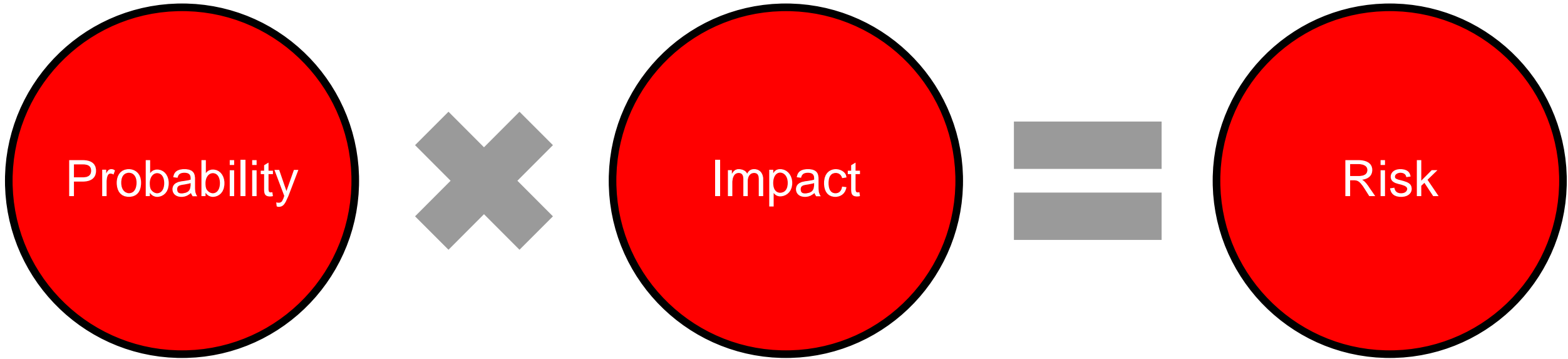
## Where does Enforcement fit in?



# How Does Enforcement Mitigate Risk?



# Risk Harm Methodology



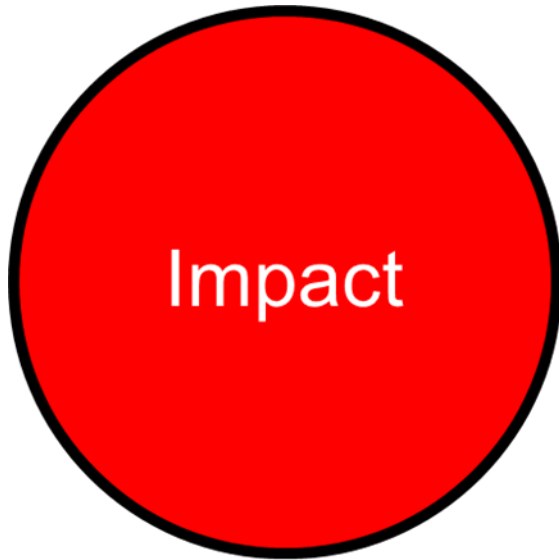
# Probability



- **Likelihood of occurrence**
  - How likely is it that the violation would have occurred again, or would continue to occur, during the violation's time duration?
- **Effectiveness of preventative and corrective controls**
  - How effective were the entity's systems (e.g., policies, procedures, etc.) at preventing and detecting the violation's occurrence?



# Impact



- **Potential Harm Magnitude**
  - What was the potential harm to the reliability of the BES posed by the violation?
- **Potential Harm Occurrence**
  - How likely is it that the potential harm level would have actually been realized during the violation's duration?

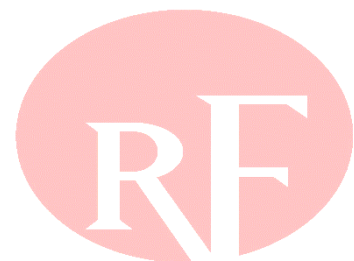




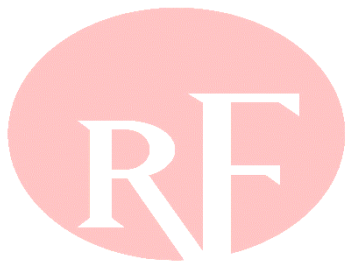
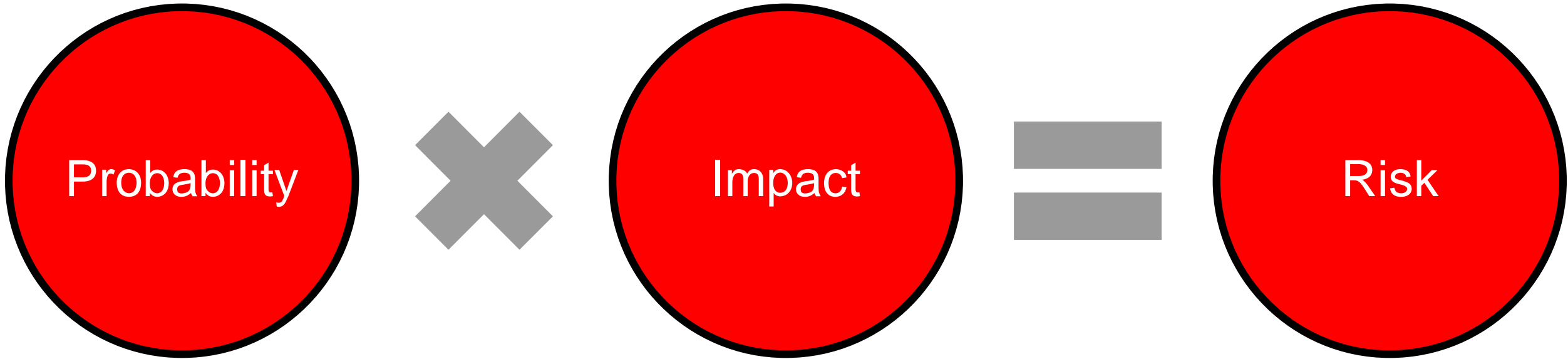
# Risk Matrix

➤ This equation can be visualized through a risk matrix:

		Impact				
		Trivial	Minor	Moderate	Major	Extreme
Probability	Rare	Low	Low	Low	Medium	Medium
	Unlikely	Low	Low	Medium	Medium	Medium
	Moderate	Low	Medium	Medium	Medium	High
	Likely	Medium	Medium	Medium	High	High
	Very likely	Medium	Medium	High	High	High

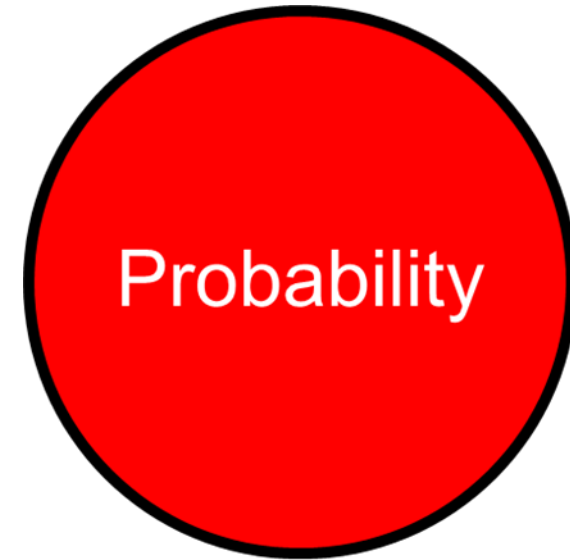


# Risk Harm Methodology



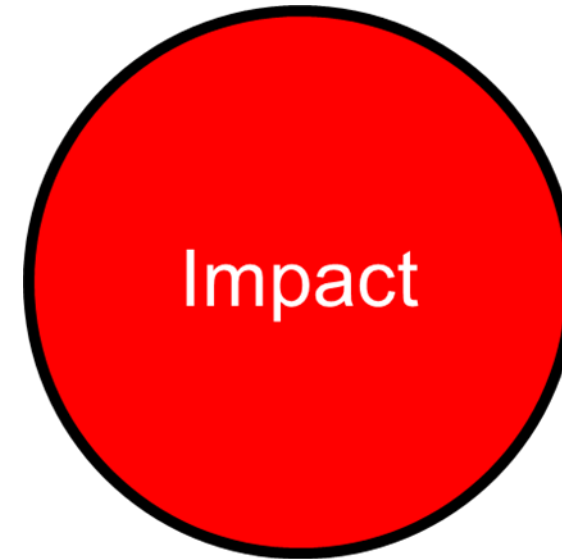
# Probability: Information You Need to Know

- **How was the violation discovered?**
- **What internal controls are in place?**
- **What is the root cause of the violation?**
- **Describe your defense in depth controls and protections**



# Impact: Information You Need to Know

- **How many assets are affected?**
- **What is the function of each asset affected?**
- **Where are the affected assets?**
- **What business units are affected?**



# Typical Factors Affecting the Disposition of Potential Noncompliances

- **Number and Function of Assets Affected**
- **Duration**
- **Speed of Mitigation**
- **Effectiveness of Internal Controls**
- **Scope**
  - Keep in mind, this is not an exhaustive list of factors



# The Impact of Information Quality

## Example #1

- User granted access to server within ESP with no corresponding approval ticket
- Discovered during review of ESP
- Root cause: human error
- Mitigating Factors:
  - User had authorized access to ESP
  - Server had anti-virus and anti-malware protection

## Example #2

- Server at issue was a historian server
- Quarterly Review identified the issue 3 months after it occurred
- Access lasted for 2 months
- Root cause: responsible individual misread approval ticket
- Mitigating Factors:
  - Access was read only
  - This was the only error in 600 processed approval requests



# Mitigation Plan Quality

## Example #1

- **Missed PRC-005 testing on 50 relay schemes due to misclassification of assets in database**
- **Mitigation Steps:**
  - Performed required tests on affected assets
  - Modified maintenance database to ensure all assets are correctly classified and scheduled for future maintenance



## Example #2

- **Mitigation Steps:**
  - Performed extent of condition review of over 500 substations beginning with highest risk locations
  - Discovered additional missed assets that were never entered into database or had their entry delayed
  - Implemented additional internal controls
    - Monthly verification check for existing assets
    - Verification checklist for new facilities
    - Verification process for new equipment added to existing facilities



# Takeaways

- **Leverage RF's overall approach to risk as a roadmap to connect your own activities to risk**
- **Use your understanding of the factors that affect risk to become more proactive**
- **Make sure the quality of information you communicate truly reflects the quality of actions you're taking**
- **We're here to help:**
  - Checklist
  - Case Managers





# Questions & Answers

**Forward Together**  **ReliabilityFirst**