

August 2025 Cyber Security Tip: Understanding the Differences of Threats, Vulnerabilities, Incidents, and Breaches



A **vulnerability** is a weakness in a system that can be exploited by a threat, such as a Common Vulnerabilities and Exposures (CVE).

A **threat** is a potential danger that could exploit a vulnerability, such as a phishing email containing malware or an insider threat.

If you receive suspicious emails, click the “report phishing” button. Report any unusual activity to cyber.security@oa.mo.gov and notify your supervisor.



An **incident** is an event that disrupts normal operations, ranging from a power outage to a major data breach, and may trigger a business continuity plan.

A **breach** is the successful exploitation of a vulnerability, leading to the unauthorized access, disclosure, or loss of sensitive data, which can result in significant financial, reputational, and legal consequences.

Immediately notify cyber.security@oa.mo.gov if you suspect you are experiencing an incident or breach. Do not power off your system.



Key takeaway: Understanding the differences between these attacks and advanced planning of how to handle them allows for swift response and can prevent unnecessary outages and costly incidents.