

# 10 Cybersecurity Questions Your Organization Should Be Able to Answer!

March 2025



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#### Learning Objectives

Recognize common threats and social engineering techniques

At the end of this session, you will be able to: Identify online behaviors that can lead to increased exposure

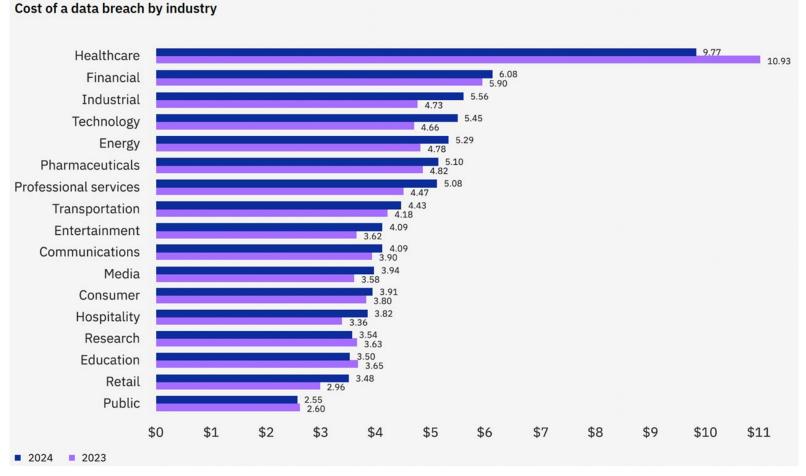
Recall where the organization can focus valuable risk mitigation resources

Discuss how to develop and refine a framework of knowledge to plan future security efforts





# The Why









1. Do We Have a Formal Information Security Program in Place?



## The importance of information

The Information Security Program Should Establish The need to protect information

Roles and responsibilities

Enforcement of policies





#### Policies, Standards, and Procedures

#### Network and system policies

- Logging and monitoring of security events
- Remote access
- Wireless networking
- Patch management
- Firewall management
- Antivirus management
- Intrusion detection/prevention

#### The Board should review (annually)

- Information security program and status
- IT and information security policies
- Security breaches or attempted breaches
- IT strategic plan
- Information security risk assessment
- Business continuity plan and testing results
- Incident response plan
- Results from vendor management reviews
- Insurance coverage for cybersecurity



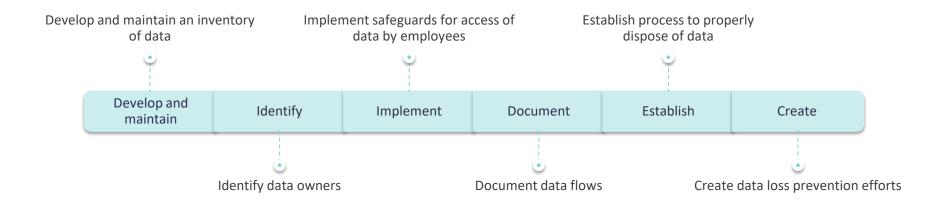




# 2. What Data is Important to Our Organization?



#### **Data Protection**







Organizations should strive to have at least three levels of data classifications.

- Public
- Internal use
- Confidential



Controls should be implemented for each level of classification regarding data handling.





### Data Backups



Attackers are getting smarter and deleting or encrypting online backups; so, organizations should confirm that they have off-line copies of backup and restore files available



Backup and restore files should be saved in well secured location



Perform an in-depth review of file permissions for network file shares



Test the restoration of your data







3. When Was Our Last Compliance or Security Audit Performed?



### Compliance and Operational Frameworks

Regulatory, Contractual, and Operational frameworks require regular/periodic assessments

• GLBA, FERPA, HIPAA, NERC/CIP, State Laws

• PCI – DSS, CMMC

• CIS Critical Controls, NIST Standards, HITRUST

--- Regulatory

--- Contractual

--- Operational standards

• These all have defined expectations for system settings, controls, operational procedures, and independent testing, assessment and reporting.

In nearly every case, these frameworks require independent testing at least annually.





IT Systems are changing under the covers all the time: security patches, features updates, user roles and permissions, etc...

Independent security assessments should validate adherence to standards and expectations and shine a light on risks related to exceptions.

Annual Security Assessments Audit tracking mechanism should be in place to regularly report on the status of outstanding audit and assessment findings and remediation efforts.







4. How Are Vulnerabilities
Managed at The
Organization?



### Vulnerability Management



How are vulnerabilities defined and identified?

Threat Intelligence?
Internal Scanning?
Vendor
Collaboration?



Within how many days are critical and high vulnerabilities addressed for:

Operating systems? Network devices? Applications?



Are there any endof-life systems in the environment?

What is the goal with these systems?



Are exceptions documented?

Is there an approval process?



How often do we scan our networks for vulnerabilities?

Scan profiles?







5. Are Employees Receiving Security Awareness Training?



### Consistent Security Awareness Training is Essential

- 1 \_\_\_\_\_ training based on current \_\_\_\_\_ requirements
- Password strength and confidentiality

3 Document destruction

4 Locking and logging off computers

5 Social engineering and phishing

Data loss risks (removable media, email, third-party storage sites, social media posts)

Acceptable use





#### User Education and Phishing Awareness

Malware typically needs a helper to do its job.

 Educate users on phishing scenarios and consider internal phishing "tests" to gauge employee readiness.

 Tests should familiarize employees with common phishing scenarios as well as teach employees how to identify masked links and spoofed sender addresses.







# 6. Are We Ready For a Cyber Attack?



#### Are We Ready?

What are we doing to prevent cyber attacks?

What will we do if we are attacked?

Have we been attacked/compromised in recent history?

Did this result in data loss?







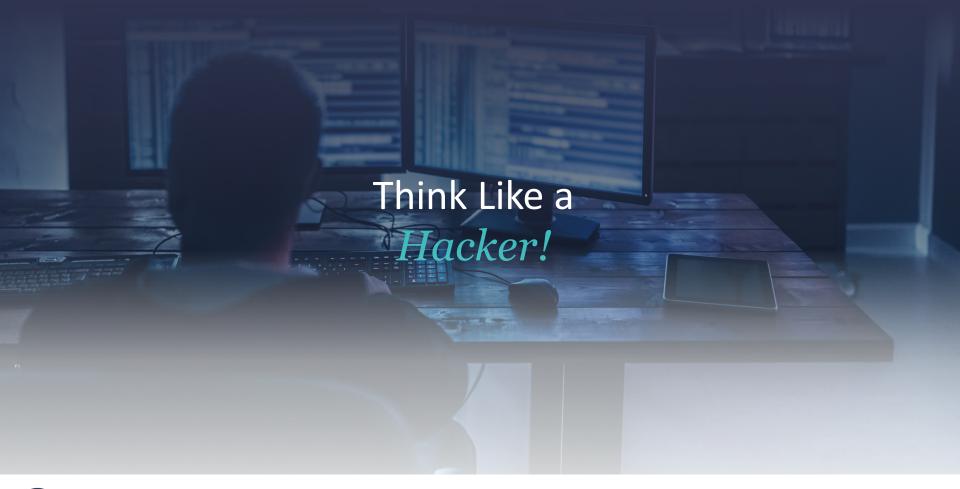






# 7. What Could an Attacker Do in Our Environment?







### Penetration Testing Uncovers Risks and...

Reveals system vulnerabilities and misconfigurations that are beyond the scope of a vulnerability scanner; validates effectiveness of monitoring, logging and alerting

Evaluates the effectiveness of security awareness training and employees' ability to detect and report social engineering attacks (email phishing, pretext phone calls)

Allows organizations to receive a "fresh look" at the network from an outside perspective that is free from internal bias

Red Team/Black Box/Adversarial Simulations test the systems and the staffs "recognize, react, and respond capabilities"

\*Penetration testing of information systems should be performed at least annually or when major changes occur







# 8. Do We Have an Incident Response Plan in Place?



#### The Incident Response Lifecycle

Preparation

Identification

Containment

**Eradication** 

Recovery

Lessons learned





#### Preparation

Can we properly respond to comprehensive security incidents?

Create incident response policies

Develop roles and responsibilities

Establish communication procedures

Verify we have the correct people, process, and tools/technologies in place





#### **Practice** The Plan

- Like all emergency procedures, they need to be practiced
- Table-top exercises simulations where participants walk through the incident and response procedures
- Two types of table-top exercises
- Technical
- Management
- Both types should be conducted annually







#### Prove the Plan

Many businesses end up over-notifying customers about data breaches, significantly increasing costs and risk of litigation

Low visibility into IT infrastructure means lack of forensic evidence to determine which system or data hackers accessed

Conduct trial forensic exercises to determine you have the proper data and visibility













# 9. How Do We Assess Third-Party Risks?



How do we select and onboard vendors?

Is there an assessment of risk associated with the onboarding of vendors?

Vendor Due Diligence

Do vendors adhere to our policies, standards, and procedures?

Do we review assessments/audits of our vendors?







# 10. Do We Have a Business Continuity and Disaster Recover Plan in Place?



### **Business Continuity Planning**

Continuity event planning and preparedness – Business Impact Analysis (BIA) documentation

Responsibilities and communication plans

Alternate procedures for critical business processes while systems/applications and facilities are unavailable

Alternate locations/facilities where work can commence during disaster situation

Recovery strategies and procedures for critical systems/applications

Continuity planning for key technology service providers and vendor-hosted systems/applications





### Planning for a

(pandemic)







#### Plan the Test and Test the Plan!

The BCP should be tested such that every critical component is tested at least once every three years (systems, processes)

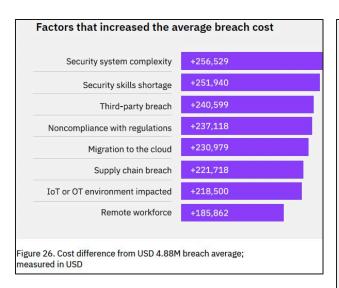
A test plan should show scheduled testing for the current year

BCP testing should include networking, hosts, personnel, and procedures





#### Incident Preparedness Cost Savings



Source: IBM Security Cost of a Data Breach Report 2024



- Global Average cost is \$3.5M
- The impact of 28 factors on the average cost of a data breach





#### Thank you!

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#### Resources

- CLA Cybersecurity Services:
  - https://www.claconnect.com/en/services/information-security
- CLA Digital Services:
  - https://godigital.claconnect.com/
- IBM Annual Data Breach Report
  - https://www.ibm.com/reports/data-breach
- Center for Internet Security Critical Controls Resources
  - https://www.cisecurity.org/controls





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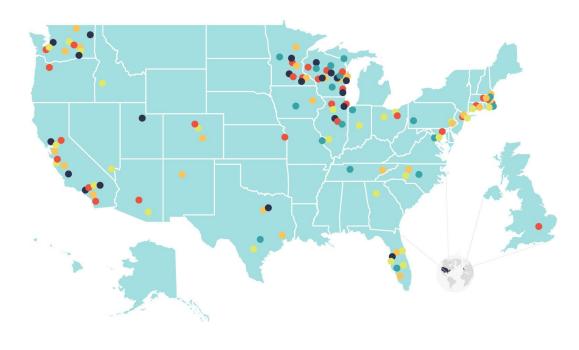
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#### Cyber Security Services At CLA

Information Security offered as specialized service offering for over 25 years

- Penetration Testing and Vulnerability Assessment
  - Black Box, Red Team, and Collaborative Assessments



- IT/Cyber security risk assessments
- IT audit and compliance (HIPAA, GLBA/FFIEC, NIST, CMMC, CIS, etc.)
- PCI-DSS Readiness and Compliance Assessments (PCI-DSS)
- Outsourced Information Security Advisory
- Incident response and forensics
- Independent security consulting
- Remediation assistance
- Internal audit support









### **CLA Cybersecurity Helps Clients**



Governance, risk, and compliance

Risk assessments
IT controls assessments (NIST, CIS, etc.)
Policy development
Compliance assessments (PCI, GLBA, HIPAA, etc.)



Security testing

Penetration testing
Vulnerability assessments
Social engineering (phishing, phone calls)
Computer forensics









### Penetration Testing

CIA has been providing penetration testing and vulnerability assessment services for over 25 years. These services rely on a combination of tools that are developed internally by CIA cybersecurity professionals, as well as open-source and commercially available software. Our professionals are constantly on the lookout for new tools and tactics to continually enhance their capabilities. Engagement projects can range from highly collaborative to Red Team assessments designed to mimic true adversaries to assess response capabilities.

Penetration Test Goals	Examples
Penetration Testing, executed in a collaborative manner, to identify exploitable vulnerabilities in the environment and gauge the impact the vulnerabilities have to the organization.	Application / API Penetration Test External Penetration Test Internal Penetration Test Social Engineering Wireless Network Penetration Test
Penetration Testing used to evaluate logging and monitoring capabilities; or used to evaluate your ability to recognize, react, and respond.	Purple Team collaborative assessments  Red Team covert assessments
Penetration Testing used to satisfy regulatory or compliance requirements.	Various compliance frameworks and regulatory bodies require or recommend penetration testing, including GLBA, FFIEC, FTC, HIPAA, and PCI.

"Penetration Testing is a process. It can be applied to any system, application, or network. What's important is to define the organization's goals and objectives."

#### Contact us to learn more:

https://www.claconnect.com/en/services/information-security/

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