

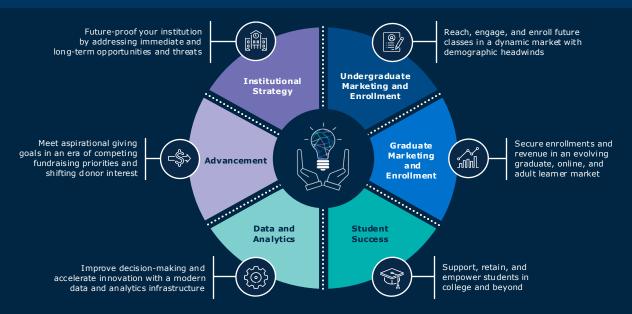


Mobilizing Crisis Leaders to Respond to Security Incident Emergencies



# Education's Trusted Partner to Help Schools and Students Thrive

## **Insight-powered Solutions for Your Top Priorities and Toughest Challenges**



We partner with 2,800+ institutions to accelerate progress, deliver results, and enable lasting change.

95%+ of our partners return to us year after year because of results we achieve, together.

- Why Conduct a Tabletop Exercise?
- Guidelines and Ground Rules: Preparing for a Security Incident Response Tabletop Exercise
- Incident Response Prompt and Scenarios
- 4 Discussion: Lessons Learned and "After-Action"

# What is a Tabletop Exercise?



#### **Immersive**

Provides rich, detailed description of a high-probability incident

#### Rigorous

Allow leaders to assess coordination, communication, and decision-making capabilities

**Tabletop Exercise:** Team-based simulation activities that allow leaders to practice staff and resource mobilization in response to a short-term incident

#### **Cross-Functional**

Can include a curated group of relevant stakeholders, from the president's cabinet to divisional leadership teams

#### **Efficient**

Requires only a few hours of time and can be completed with existing staff and resources

# What is a Security Incident?



# Key Cybersecurity Terminology



An event where there is **potential for harm** to occur

 Ex: User received a phishing message and reported it to the security team

## **Security Incident**

An event where there is **confirmed harm** 

- Not all security incidents rise to the level of security incident
- Ex: User received a phishing message, opened the attached file, and installed ransomware

# Use of Data Breach Terminology Can Open Institutions Up to Risk



- **Do not describe a security event or an incident as a data breach.** Misuse of the term could expose the institution to additional risk and obligations.
- The term *data breach*<sup>1</sup> has a very specific legal definition and each state is subject to different data breach laws.

NIST defines a data breach as "An incident that involves sensitive, protected, or confidential information being copied, transmitted, viewed, stolen, or used by an individual unauthorized to do so."

# Setting the Table



## Accelerating IT's Response to Future Security Incidents

## Why Tabletop Exercises Are Superior to Simply Distributing a Plan



# Practice Readiness and Response

- Allow teams to rehearse highstakes decisions in a low-stress setting
- Build collective problem-solving skills



## Plan for the Unanticipated

- Raise novel questions that existing protocol doesn't address
- Allow leaders to compare interpretation of current policy



# Evaluate Existing Protocols

- Identify if policies and plans rely on scarce resources or individual efforts
- Assess communication practices



# Clarify Capabilities and Responsibilities

- Accelerate decisionmaking on who "owns" what
- Vet if teams and departments can deliver on execution

# Components of Today's Exercise



#### **Intro & Ground Rules**

## Incident Response

# Post-Incident Debrief

#### "Hot Wash" Discussion and After-Action

- Review the purpose of the exercise
- Establish rules of engagement

Recommended time: 5-10 mins

- Introduction of the incident
- Facilitated response discussion

Recommended time: 30-40 mins

- Facilitated discussion of existing protocol
- Identification of protocol vulnerabilities
- Review lessons learned and key takeaways
  - Document challenges and concrete next steps

Recommended time: 15-20 mins

Recommended time: 20 mins

**Total Recommended Time** 

90 minutes

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# Our Goals for Today



Learning Objectives for the Tabletop Exercise



## **Existing Protocol Review**

- 1. Invoke all protocols in place
- 2. Identify when/why we should deviate from those protocols



#### Role Call

- Highlight key roles that attendees play in incident response
- 2. Identify cross-team responsibilities



## **Vulnerability Analysis**

- 1. Uncover vulnerabilities in current protocols
- Remedy overreliance on individuals, resources, or systems that may not be available



## **Suggested Participants**

Key IT/security function stakeholders and incident response/emergency management personnel in place

# Attendee Roles





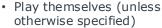
IT, Crisis Response, or **Leadership Team** 



**Facilitator** 



- Oversee the exercise
- Read the incident information, and ask targeted discussion questions throughout
- Keep the group on pace
- Ensure broad and representative participation



- Respond to the incidents as if they're actually
- happening



#### Observer/Evaluator

- Take notes on quality of dialogue and decisionmaking, as well as group dynamics
- Share observations during after-action planning

# **Ground Rules**



## **Tabletop Exercise Rules of Engagement**

Even though it feels odd, try to behave as though this is really happening.

2 You'll inevitably want more information than is provided but work with what you have. Plan for possible contingencies and state your assumptions about what you believe to be true or what you do not know.

3 You **may not** use your smartphone to call, text, or research during the activity

- Thinking out loud can sometimes keep others from thinking clearly. Try to take notes and only speak when you're ready to share, unless the whole group is at a loss and you must all brainstorm together to generate ideas.
- Remember, a tabletop exercise is a "nofault zone" where people can ask any question and admit uncertainty – it is a test of our plans, not of our leaders. There are no "hidden agendas" or trick questions in this exercise.

6 Any additional rules or questions?

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# Responding to a Security Event: Part A



## Thursday, October 8 @ 2PM

A security analyst has reported to the CIO that data related to [INSTITUTION] and related credentials appears to have been posted to Twitter.

The CIO has followed up with the security analyst by phone and email, collecting screenshots and URLs from the original social media post.

The President has asked for an update by the end of the day.

### **Discussion Questions**



Is this a security incident?



Who needs to know about this?



What information do you need that you do not have?



What are the next steps?

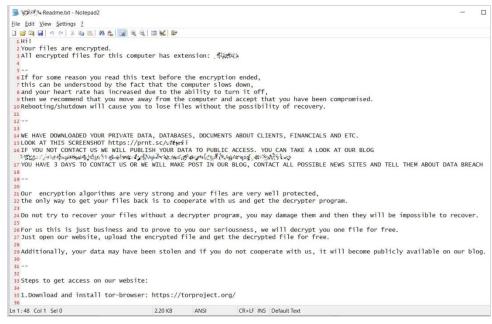
# Responding to Security Event: Part B



## Thursday, October 8 @ 5PM

Multiple members of the security team have reported computer problems to the Service Desk.

Each ticket is reporting a similar situation: a message has popped up on their computer with a disturbing message.



### **Discussion Questions**



Is this a security incident?



Who needs to know about this?



What information do you need that you do not have?



What are the next steps?

# Responding to a Security Incident: Part C



## Friday, October 9 @ 10AM

Late Thursday night into Friday morning, Information Security has received multiple alerts from its endpoint detection and response system.

Internal documents have been posted online by the same account. Some of these documents include data extracts showing name, DOB, SSN, address, and other information.

Multiple partners have contacted [INSTITUTION] management asking for more details.

There is increased pressure on [INSTITUTION] to make a public statement as The Chronicle and [LOCAL NEWS OUTLET] have asked for comment.

#### **Discussion Questions**



Who should be notified?



What are our next steps?



What information do we need that we have not acquired?

# Responding to a Security Incident: Part D



## Friday, October 9 @ 6PM

Information Security has confirmed the source of the leaked documents to have come from [COLLABORATION TOOL]; an unknown person was able to use a remote access tool to acquire these documents.

The remote access tool and malware has been removed from mailboxes to prevent reinfection.

All infected endpoints are reformatted and files are restored using backups from [DATA RECOVERY SYSTEM].

### **Discussion Questions**

- What additional clean-up needs to take place?
- What partner outreach needs to occur and by whom?
- Do we need a proactive incident communications strategy?
- 4

How do we prioritize the actions we have to take?

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# "Hot Wash" Debrief on Lessons Learned



# Four Key Questions to Consider

1 What worked well in this tabletop exercise?



- What did we seem to struggle with in this tabletop exercise? What might be our areas for improvement?
- What were the biggest discrepancies in our expectations or understandings?

What other perspectives were missing that should be included going forward?

# Conducting a "Hot Wash" Debrief

- In a "round robin" format, allow every participant to share few minutes of thoughts, asking participants not to repeat one another.
- Once every participant has spoken, ask the facilitator and observer to share notes.
- Finally, time permitting, begin to identify specific shortcomings worth addressing (next slide).

# Crafting an After-Action Report



# Identifying Concrete Next Steps after the Debrief







- Outline vulnerabilities in existing policies and practices
- Highlight areas for improvement
- Articulate concrete next steps, and track progress as a team

Access the After-Action Report Template <u>Here</u>

1) For priority, use 3= most urgent, 2= im port ant and time sensitive, and 1= relevant and would be helpful, but not urgent. Higher priority deficiencies could be those that most impa d our educational and research missions, most endanger the health and safety of our community, or most violate regulations and laws. Lower priority deficiencies would be those that merely seek to confirm to best practices or industry standards or that would enhance the oughty of the response.