U.S. DEPARTMENT OF HOMELAND SECURITY

CISA

CYBER+INFRASTRUCTURE

Ransomware works

- Who: Ransomware is a threat vector that is rife for bad actors, both criminal enterprises and nation-states have made use of ransomware.
- What: Ransomware is a type of malware that encrypts the files on a user's device or a network's storage devices.
- Where: Top three targeted groups: (1) Municipalities, (2) schools, (3) hospitals. Clearly hitting the underrepresented/more vulnerable.
- When: Timing has seemed opportunistic, not strategic
- Why: Ransomware is a business model that works, victims are paying higher and higher ransoms. The willingness for victims and their insurers to pay out incentivize further use of ransomware.
- How: Ransomware-as-a-service kits mean nearly anyone can try their hand at a running a scam. Decades of lack of investment in IT, and a focus on systems operating more than system security, has left organizations across the country vulnerable to attack by ransomware actors.

Very Familiar Guidance

- Start with good cyber hygiene

Prevent It

Vulnerabilities:
The Technical and The People

- Always be patching.
- Educate on phishing.
- Don’t rely on people, authenticate inbound email to prevent receipt of spoofed emails.
- Filter executable files from reaching end users

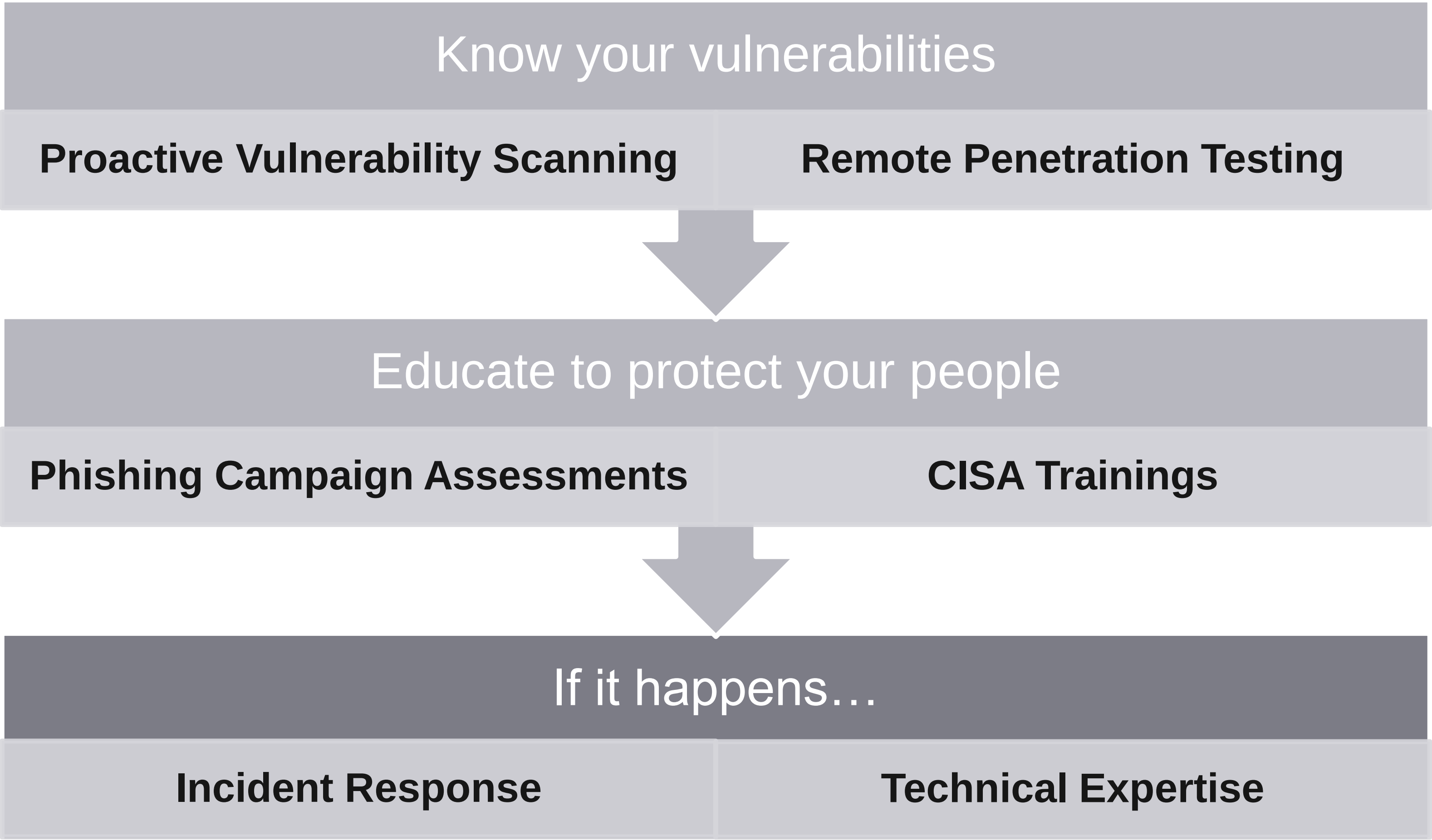
Contain It

- Segment your networks; make it hard for the bad guy to move around and infect multiple systems
- Limit access- Apply the principle of least privilege to all systems and services.
- Enforce access controls- Multi-factor
- Restricting user and third-party permissions to install and run software applications can help prevent malware from executing and spreading.

Plan to Recover

- Ask for help! Contact CISA, the FBI, or the Secret Service
- Work with an experienced advisor to help recover from a cyber attack
- Know your system’s baseline for recovery
- Review disaster recovery procedures and validate goals with executives

CISA’s support



Know your vulnerabilities

Proactive Vulnerability Scanning

Remote Penetration Testing

Educate to protect your people

Phishing Campaign Assessments

CISA Trainings

If it happens…

Incident Response

Technical Expertise

No cost, just ask…
CIOCC@CISA.dhs.gov
(888)282-0870

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Before Their Problem Becomes Yours

- Attackers looking to increase their likelihood of receiving payment want to spread to as many victims as possible
- Managed Service Providers have been targeted to both exploit and propagate ransomware
- Know who has access to your systems, and what actions they’re authorized to take.
- We’ve seen State and local governments enable MSPs to have persistent access and sweeping administrative privileges. If the MSP is hit with ransomware, there’s a high risk of their compromise.

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