



**NATIONAL  
CYBERSECURITY  
AWARENESS  
MONTH**



**NATIONAL CYBERSECURITY  
AWARENESS MONTH 2020**



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# What Is NCSAM?

National Cybersecurity Awareness Month (NCSAM) raises awareness about the importance of cybersecurity across our Nation.





# Cybersecurity “So What?”

## Did You Know?

Antivirus software is available for mobile devices, which are an easy, common target for hackers and other bad actors.



## Cybersecurity Common Sense

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- **Being safe online isn’t so different from being safe in the physical world!**
- **Keep Calm and Trust Your Gut!**



## Commonly Used Terms

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- **Bad Actor**
- **Hacker**
- **Cyber Attack**



# Do Your Part. #BeCyberSmart.

Cybersecurity starts with YOU  
and is **everyone's** responsibility.



There are currently an estimated  
**4.8 billion internet users** or  
**62% of the world's population.**





# Cybercrime

## Examples

- Identity theft
- Child sexual abuse materials
- Financial theft
- Intellectual property violations
- Malware
- Malicious social engineering



## What is it?

Cybercrime is any crime which is committed electronically.

This can include...

- Theft
- Fraud
- Sometimes even murder



## Why should you care?

- Crime is a danger offline and on!
- Cyber self-defense basics can go a long way to keeping you and your data out of the hands of bad actors.



# Malware

## Examples

- Ransomware
- Adware
- Botnets
- Rootkits
- Spyware
- Viruses
- Worms



## What is it?

Any software intended to...

- Damage
- Disable
- Or give someone unauthorized access to your computer or other internet-connected device



## Why should you care?

- Most cybercrime begins with some sort of malware. You, your family, and your personal information is almost certainly at risk if malware finds its way onto your computer or devices.



# Ransomware

## Examples

- Cryptolocker
- Winlock
- Cryptowall
- Reveton  
ransomware
- Bad rabbit
- Crysis
- Wannacry



## What is it?

Malware designed to make data or hardware inaccessible to the victim until a ransom is paid.



## Why should you care?

- Often downloaded as malicious email links
- Damage to both financial stability and reputation
- No guarantee that you will get your data back, even if you pay
- Often used as a decoy for other malicious activity



# Bots

## Did You Know?

Not all bots are bad. When you use a search engine, these results are made possible by the help of bots “crawling” the internet and indexing content. Chatbots like Siri and Alexa are another common type of “good” bot.



## What is it?

Bots are a type of program used for automating tasks on the internet.



## Why should you care?

Malicious bots can:

- Gather passwords
- Log keystrokes
- Obtain financial information
- Hijack social media accounts
- Use your email to send spam
- Open back doors on the infected device



# Physical Cyber Attacks

## Did You Know?

Anything connected to the internet is potentially vulnerable, from e-scooters to laptops to cargo ships.



## What is it?

Physical cyber attacks use hardware, external storage devices, or other physical attack vectors to infect, damage, or otherwise compromise digital systems. This can include...

- USB storage devices
- CD/DVD
- Internet of Things (IoT)



## Why should you care?

- Easy to overlook
- Difficult to identify and detect
- Extremely difficult to remove
- Can do anything from installing ransomware, to sending copies of or modifying information systems, to dismantling networks



# Social Engineering

## Examples

- Phishing
- Pretexting
- Baiting
- Quid pro quo
- Tailgating
- Inside job
- Swatting



## What is it?

- Cybercriminals can take advantage of you by using information commonly available through...
- Social media platforms
- Location sharing
- In-person conversations



## Why should you care?

- Your privacy isn't just a luxury – it's a security measure
- Attacks can be successful with little to no programming knowledge or ability
- Technological security measures can only protect you so much – you are your best defense



# Phishing

## Examples

- Emails
- Text messages
- Phone calls
- Social media messages and posts
- Suspicious hyperlinks



## What is it?

Fake messages from a seemingly trusted or reputable source designed to convince you to...

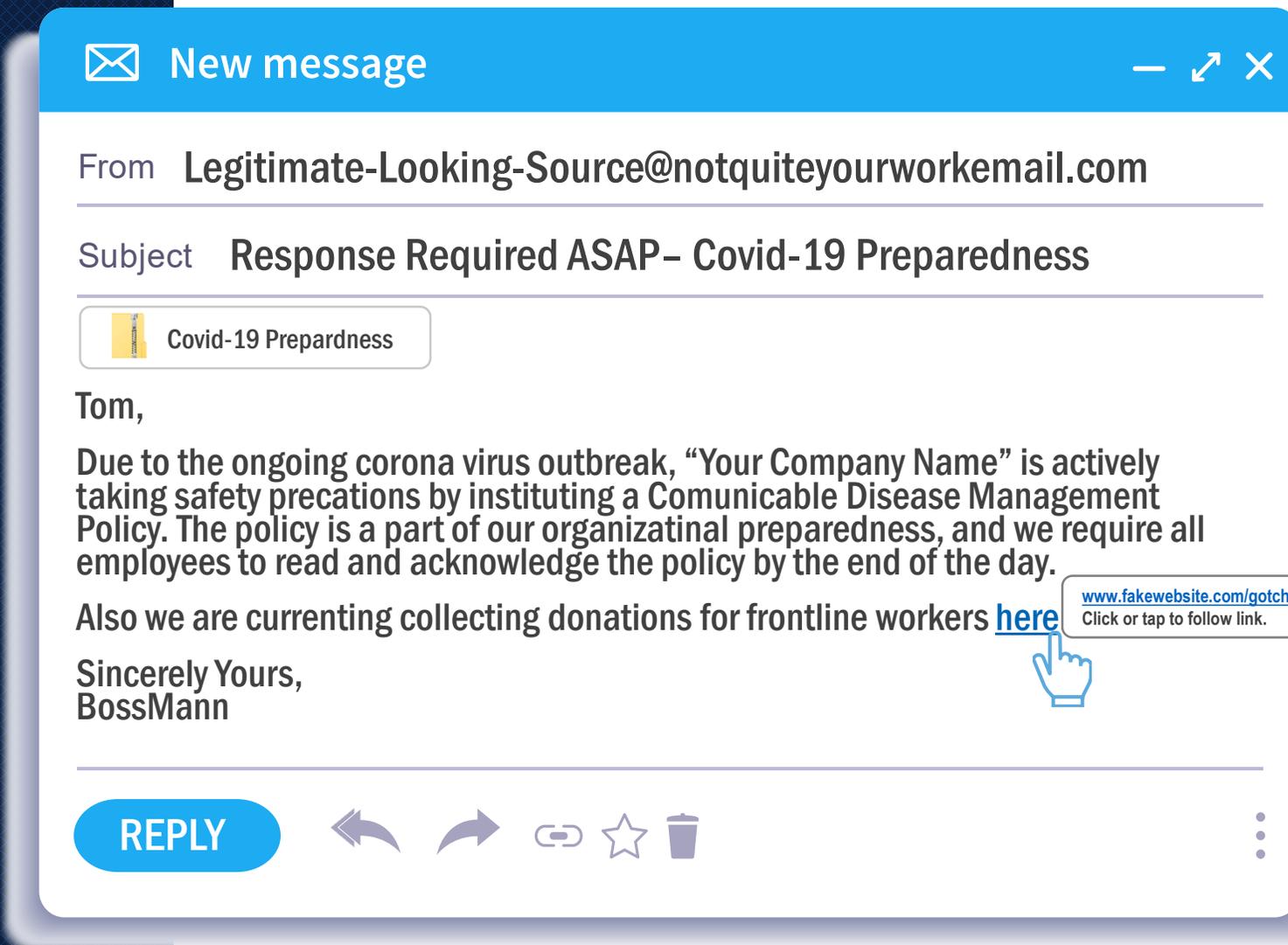
- Reveal information
- Give unauthorized access to a system
- Click on a link
- Commit to a financial transaction



## Why should you care?

- Extremely common
- Can have severe consequences
- Devil's in the details

# Would This Email Fool You?





# Swatting

## Did You Know?

Your location is embedded as metadata in every picture you take with your phone. Turn location services off when you aren't using them to make it more difficult for bad actors to view this information.



## What is it?

An attack centered around location sharing in which bad actors call the police claiming the victim has committed a crime...

- Bomb Threat
- Armed Intruder
- Violent Incident



## Why should you care?

- Physical and immediate consequences
- Sometimes was intended merely as a prank
- Arrest and serious injury can result
- Reduce risk by sharing your location only with trusted individuals, and share vacation photos only after you've returned safely home



# Other Avenues of Attack

## Examples

- Smart devices
- Mobile phone
- Thermostat
- Vehicles
- Gaming consoles
- Printers
- Medical equipment
- Industrial systems



## What are your vulnerabilities?

- Internet of everything
- Any device connected to your network
- Information collection
- Remote access
- Bluetooth
- Open ports



## Why should you care?

- Your network can be used to attack someone else
- Any device that stores information or is connected to the internet can be a vulnerability
- Assume that you are vulnerable, and take measures to understand and mitigate risk
- Don't be the "low-hanging fruit"



# How Can You Better Protect Yourself Online?



## Secure your networks.

Wireless routers are a way for cybercriminals to access online devices.



## Stay up to date.

Keep software updated to the latest versions and set security software to run regular scans.



## If You Connect It, Protect It.

One proven defense against intrusion is updating to the latest virus protection software.



## Double your login protection.

Enable multi-factor authentication (MFA) to ensure that the only person who has access to your account is you.



# Password Tips

## Did You Know?

Password or credential stuffing is a cyberattack that tries “stuffing” already comprised username and passwords from one site into another site in hopes that the user uses the same login information across platforms.

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Use different passwords on different systems and accounts

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Use the longest password allowed

\*\*\*\*\*

Use a mix of uppercase and lowercase letter, numbers, and symbols

\*\*\*\*\*

Reset your password every few months

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Use a password manager

# NCSAM's Theme and Key Message

## Theme:

- **Do Your Part. #BeCyberSmart.**

## Key Message:

- **If You Connect It, Protect It.**



# NCSAM 2020 Schedule



**October 1 and 2:**  
Official NCSAM  
Kick-off



**WEEK 1:**  
**Week of October 5**  
If You Connect It,  
Protect It



**WEEK 2:**  
**Week of October 12**  
Securing Devices at  
Home and Work



**WEEK 3:**  
**Week of October 19**  
Securing Internet-  
Connected Devices  
in Healthcare

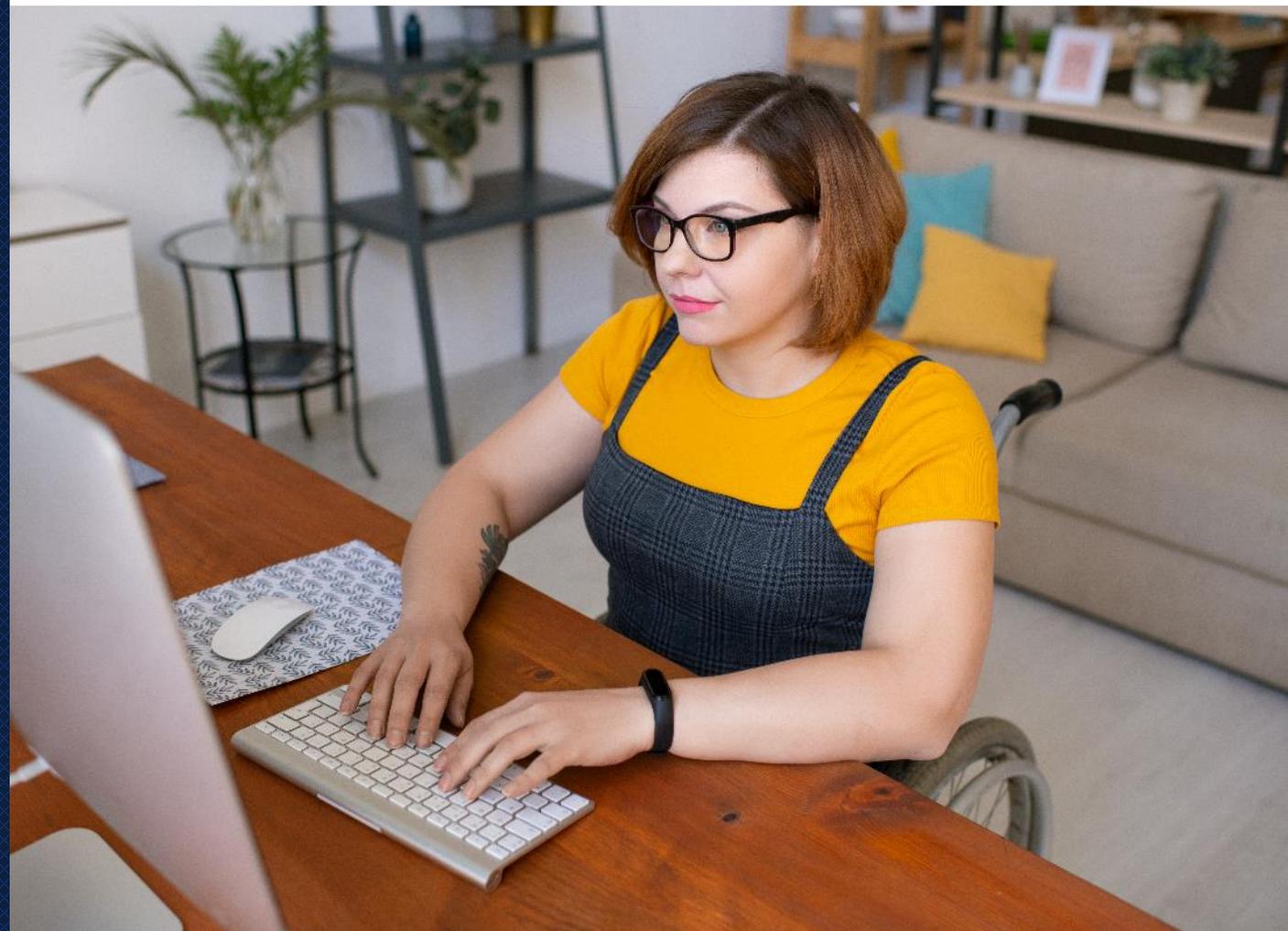


**WEEK 4:**  
**Week of October 26**  
The Future of  
Connected Devices

# NCSAM Week 1: If You Connect It, Protect It.



# NCSAM Week 2: Securing Devices at Home and Work

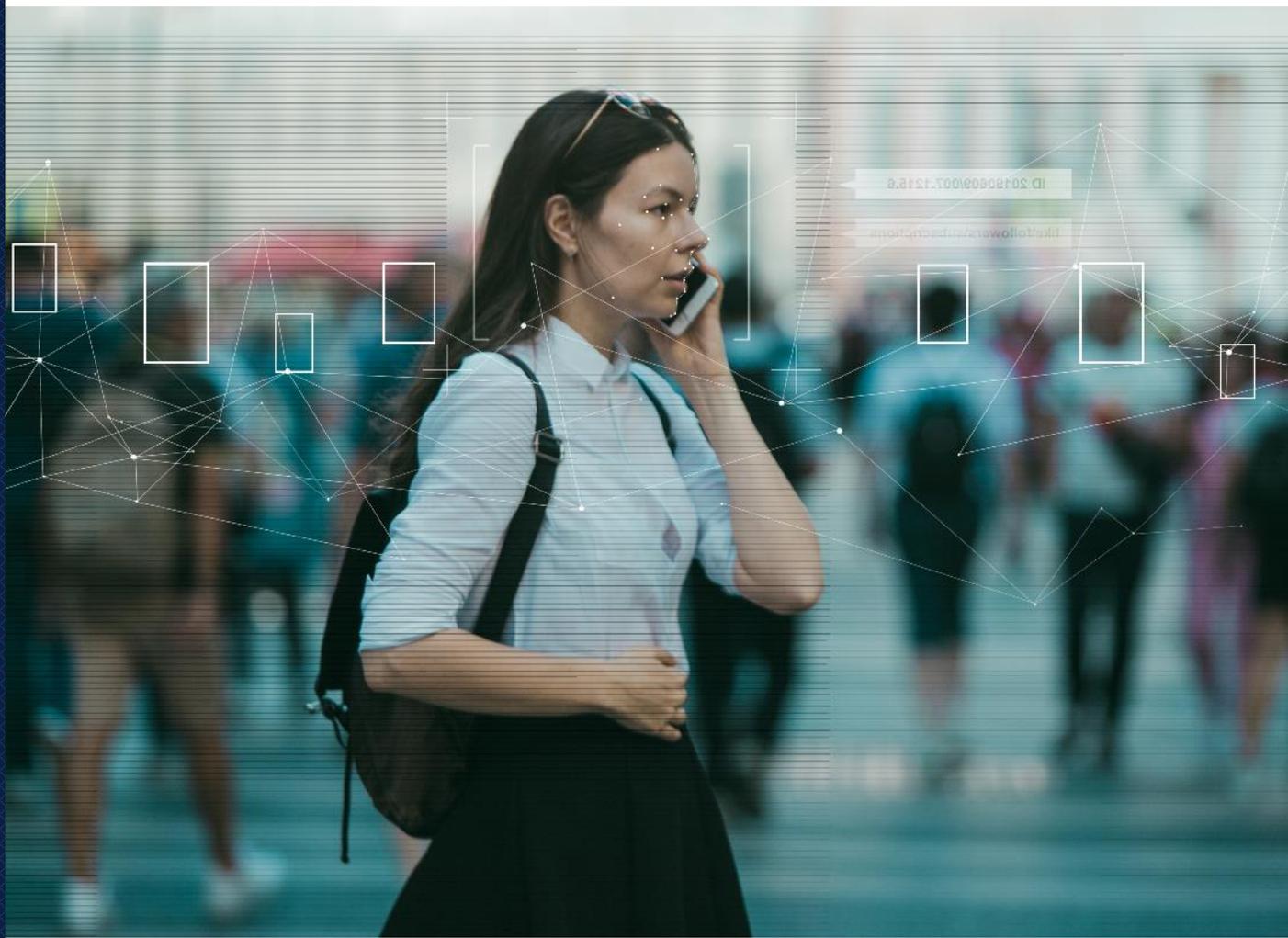


# NCSAM Week 3: Securing Internet- Connected Devices in Healthcare





# NCSAM Week 4: The Future of Connected Devices





# Raise Awareness and Get Involved

- Promote National Cybersecurity Awareness Month in social media; use the **#BeCyberSmart** hashtag
- Pass on cybersecurity tips to your friends, family, and coworkers



**For more information, contact**  
**[stopthinkconnect@hq.dhs.gov](mailto:stopthinkconnect@hq.dhs.gov)**

Visit [www.cisa.gov/ncsam](http://www.cisa.gov/ncsam) or [staysafeonline.org/cybersecurity-awareness-month/](http://staysafeonline.org/cybersecurity-awareness-month/) for more resources.