





Cybersecurity for HRSA Award Recipients

Healthy Grants Workshop

August 13, 2025

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Vision: Healthy Communities, Healthy People



Agenda

- Cyberattack Trends
- Top 10 Cyber Safety Tips
- Passwords and Multi-Factor Authentication (MFA)
- Phishing: Don't Get Hooked!
- Phishing: Examples #1 through #5
- Ransomware: A Growing Threat
- Artificial Intelligence is Transforming Cybersecurity
- Safe Browsing Habits
- What to Do if Something Goes Wrong

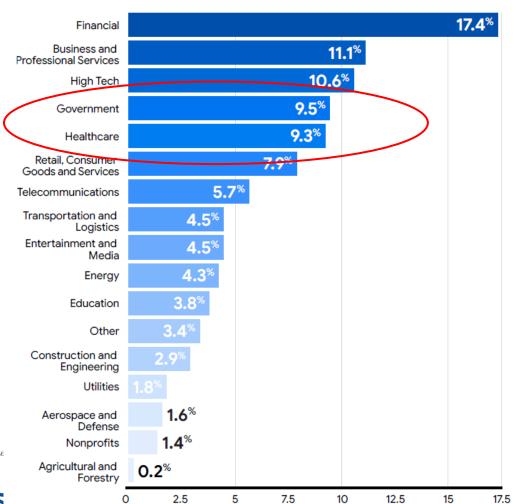




Cyberattack Trends

Targeted Industries, 2024

Industry Percent of Investigations



Initial Infection Vector, 2024



Mandiant M-Trends 2025 Report (Google Cloud Security)



Top 10 Cyber Safety Tips

- 1. Use strong, unique passwords or a password manager
- 2. Don't reuse passwords across different accounts
- 3. Turn on Multi-Factor Authentication (MFA) for key accounts
- 4. Think before you click (avoid suspicious links or attachments)
- 5. Limit what you share online (especially on social media)
- 6. Avoid public Wi-Fi for sensitive tasks (use a VPN if needed)
- 7. Keep software and devices updated (enable auto-updates)
- 8. Back up your data regularly (cloud + external drive)
- 9. Lock your devices with PINs, biometrics, or passcodes
- 10. Report suspicious activity

For more tips visit: <u>Secure Our World | CISA</u>



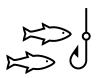


Passwords and Multi-Factor Authentication (MFA)

- NIST Special Publication 800-63B Digital Identity Guidelines
 - Passwords should be easy to remember and hard to guess, for example longer passphrases instead of complex characters (e.g., ThreeRedCatsDance!, Books&Blankets4Winter)
- MFA requires the use of <u>two or more</u> distinct authentication factors:
 - Something you know (e.g., password)
 - Something you have (e.g., mobile device e.g., app based)
 - Something you are (e.g., fingerprint or face recognition)
- Phishing-resistant MFA: Smart Cards (PIV/CAC) and FIDO2 keys (YubiKey)





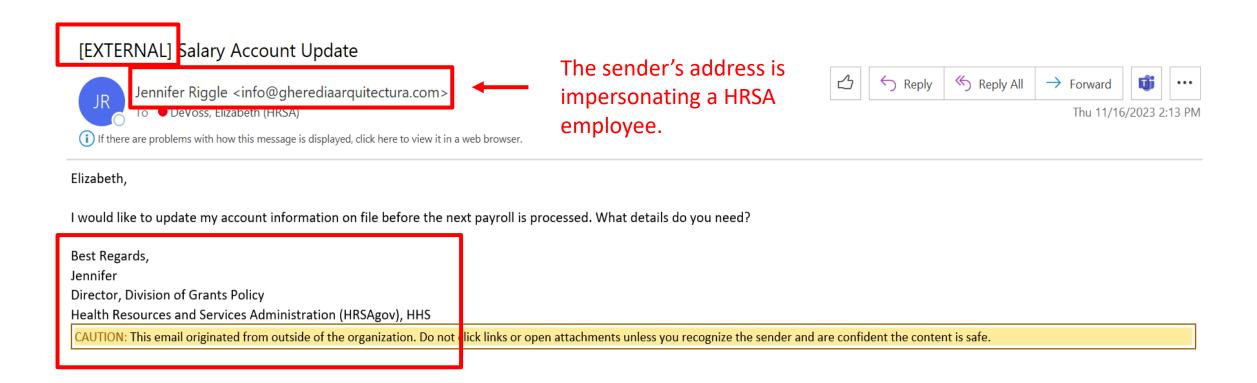


Phishing: Don't Get Hooked

- Phishing: emails or text messages trying to hook you and steal information.
- Clues: urgent language, misspellings, strange links or attachments, or unusual sender.
- **Types:** Uniform Resource Locator (URL) phishing with embedded links (e.g., click here to unlock...), attachments, credential stealing (requiring data entry), QR codes, text message, etc.
- **Targets:** 1) spray and pray, 2) spear phishing targets specific person, group or organization, 3) whaling targets high ranking executives.
- Methods: They target an emotion to motivate a response. Generate a sense of curiosity, or fear, or urgency, or reward/recognition, or entertainment, or job opportunity, or social, etc.











Subject

Unknown -

[EXTERNAL] Request #12/Sep/2023

From

Unknown *

ngewirtz@adleraphasiacenter.org

(Health Resources And Services...)

To

EDeVoss@hrsa.gov

Originating IP b224-59.smtp-out.eu-central-1.amazonses.com (69.169.224.59)

SMTP Relay

nihxwaye3as04.hub.nih.gov (10.111.201.250)

Microsoft E-Service Hrsa

Password Expiration Notice

Hi edevoss , Your password for edevoss@hrsa.gov is set to expire

on Tuesday-September-2023 19:32 PM EST.

Use same password with the button below

Continue Same password Here



The sender is trying to get a HRSA employee's password.

Learn about messages protected by Office 365

Microsoft respects your privacy to learn more, Please read our privacy

Microsoft Corporation, One Microsoft Way, Redmond WA 98054



Unknown ▼ Unknown ▼	[EXTERNAL] Potential_SPAM lp0976411@gmail.com	:New email 6542852
(Frances H. Chiodo)		
CGaney@hrsa.gov		
216.155.152.209 (2	16.155.152.209)	
smtp.gmail.com (Ur	nknown)	
	Unknown → (Frances H. Chiodo) CGaney@hrsa.gov 216.155.152.209 (2	Unknown → Ip0976411@gmail.com (Frances H. Chiodo)

Dear cganey@hrsa.gov,

We sincerely appreciate your choice to shop with us!We're excited to inform you that we have successfully received your order and payment. Your order details are as follows:

Order Number: 65840054 Order Date: November 1, 2023

Order Summary:

- Product Name: Advanced PC Security

Payment Method: OnlinePayment Status: Confirmed

- Amount: \$159.99

Please take a moment to review the order details above. If you happen to notice any discrepancies or have any questions, please don't hesitate to reach out to our dedicated customer support team by phone at +1 805 434 6192. We are here to assist you.

Thank you for choosing us for your security needs. We highly value your business and eagerly look forward to serving you. If you ever require any further assistance or have additional inquiries, please don't hesitate to get in touch with us.

Best regards, Frances H. Chiodo

Toll-free Number: +1 805 434 6192

The sender is trying to get a HRSA employee to click on the link.





Dear FAMILY VOICES OF NORTH DAKOTA, INC.

Kindly confirm if the below information about you is correct and up to date.

This is a final awareness for information verification.

Note: This secure verification link below will expire after 24 hours. We will have to revoke your license if we do not receive your

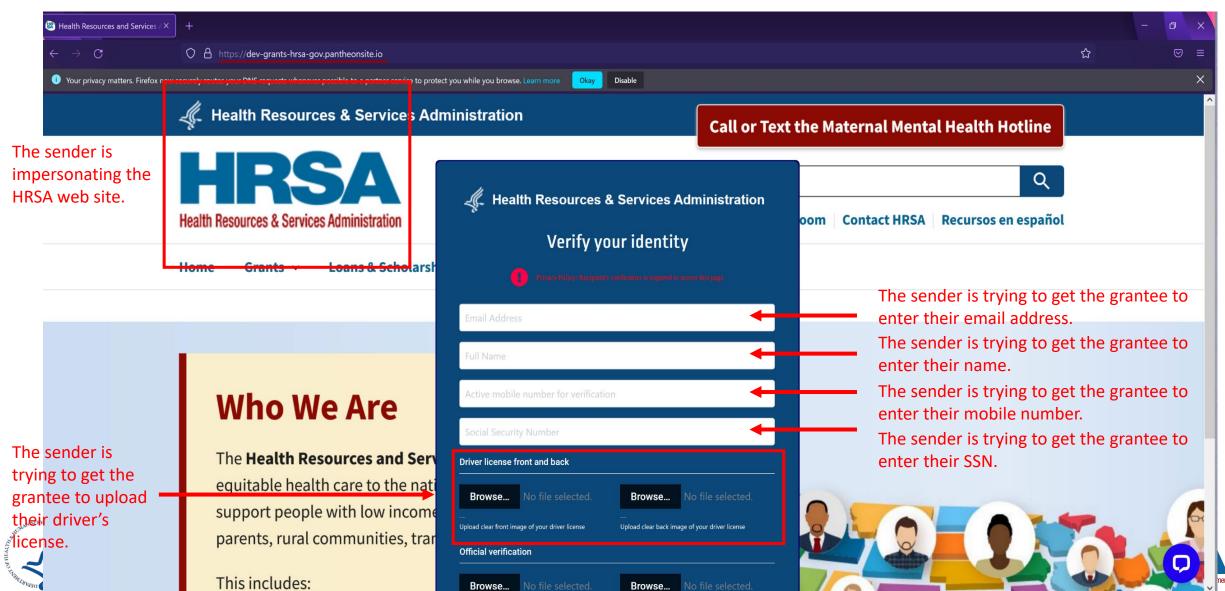


al, and privileged, and is not to provide legal advice. Unless you are the intended addressee (or authorized to receive for the intended addressee), yo on contained in the message without the sender's permission. If you have received this message in error, please advise the sender by reply email and

HHS Headquarters 200 Independence Avenue, S.W. Washington, D.C. 20201.







Ransomware: A Growing Threat

- Malicious software either encrypts your files or systems making them unusable or steals your data.
- The attackers then demand a ransom, often in cryptocurrency, either to prevent the stolen data from being leaked or to provide a decryption key to restore access.
- Average ransom payment: \$1.0 M; Average recovery cost \$1.5 M
 2025 Ransomware Report: Sophos State of Ransomware



- #1 cause: Exploited vulnerabilities keep your system updated.
- Attacks often start via phishing emails or exploited vulnerabilities of unpatched systems.
- THE SERVICES CO.

Prevention: Avoid suspicious links, report anything strange.



AI is Transforming Cybersecurity

All is a double-edged sword in cybersecurity — a powerful defender and a growing threat.

Powerful Defender:

- Al can analyze billions of events to spot anomalies faster than humans e.g., detecting zeroday malware or insider threats
- Al-driven automated response actions e.g., isolating infected machines in seconds
- Machine learning (ML) to anticipate attack patterns before they occur e.g., flagging likely phishing domains based on behavior

Growing Threat:

- AI-Powered phishing, deepfakes and auto-generated emails increase realism and volume
- Automated vulnerability scanning AI can help attackers find weak points faster
- Adversarial AI attacks cybercriminals can poison or deceive ML models





Safe Browsing Habits

- Use HTTPS websites for secure communication (look for the padlock icon).
- Look at the URL and domain name carefully and use bookmarks.



- Avoid downloading files or software from untrusted sources. If unsure, check URL and files:
 - ✓ VirusTotal (https://www.virustotal.com)
 - ✓ Google Safe Browsing (https://transparencyreport.google.com/safe-browsing/search)
 - ✓ URLVoid (https://www.urlvoid.com)
- Don't click on pop-ups or ads that seem too good or too alarming to be true.
- Avoid public and open Wi-Fi for sensitive transactions (e.g., banking).
- Mobile: Install apps only from official stores (Google Play, Apple App Store).



What to Do if Something Goes Wrong

- The first few minutes after a ransomware attack are crucial. Swift isolation and notification can dramatically reduce damage. For example, disconnect device from the network, report it, and preserve evidence (e.g., don't reboot, but take pictures, etc.)
- Lost/stolen device or clicked on a suspicious link? Report to IT security staff immediately.
- Security is everyone's responsibility. See something weird? Speak up.
 - Unusual activity (e.g., password reset emails you didn't request).
- Report cyber incidents to your IT Staff and the HRSA Project Officer or the HRSA Contact Center as soon as possible.
 - HRSA can also take steps to take down the malicious site.



Questions







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www.HRSA.gov



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