

Joseph Frohlich Cybersecurity Coordinator, Montana



CYBERSECURITY & INFRASTRUCTURE SECURITY AGENCY

Cybersecurity and Infrastructure Security Agency (CISA)

+ 0



VISION

Secure and resilient infrastructure for the American people.

MISSION

Lead the national effort to understand, manage, and reduce risk to the nation's cyber and physical infrastructure.



CISA's Core Capabilities AT A GLANCE





PARTNERSHIP DEVELOPMENT



INFORMATION AND DATA SHARING



CAPACITY BUILDING



INCIDENT MANAGEMENT & RESPONSE



RISK ASSESSMENT AND ANALYSIS



NETWORK DEFENSE

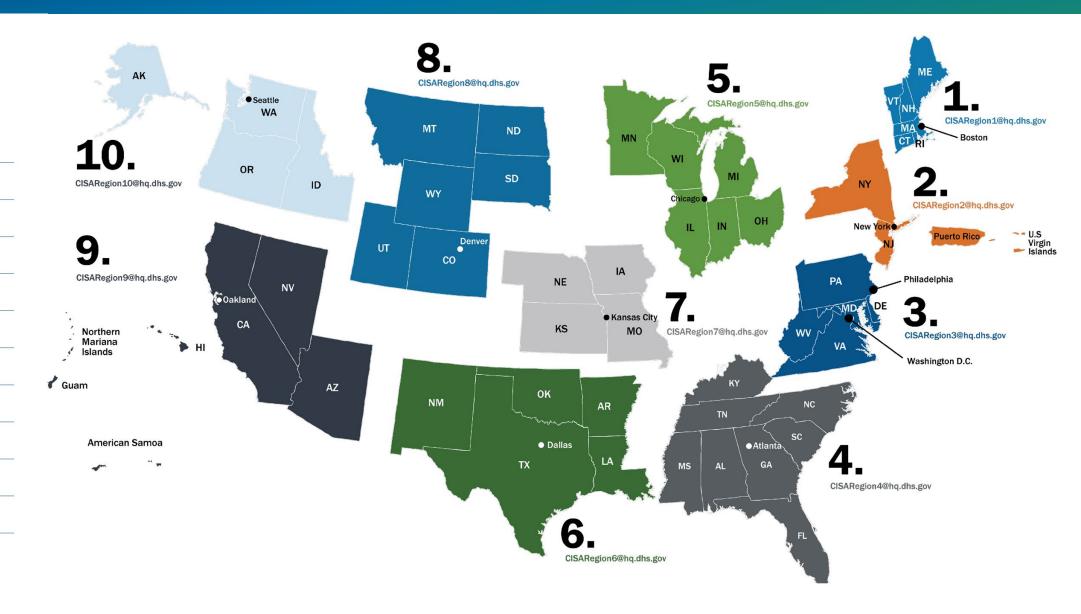


EMERGENCY COMMUNICATIONS

CISA Regions



- 2 New York, NY
- 3 Philadelphia, PA
- 4 Atlanta, GA
- 5 Chicago, IL
- 6 Dallas, TX
- 7 Kansas City, MO
- 8 Denver, CO
- 9 Oakland, CA
- 10 Seattle, WA



CISA Region 8 – Montana Cadre

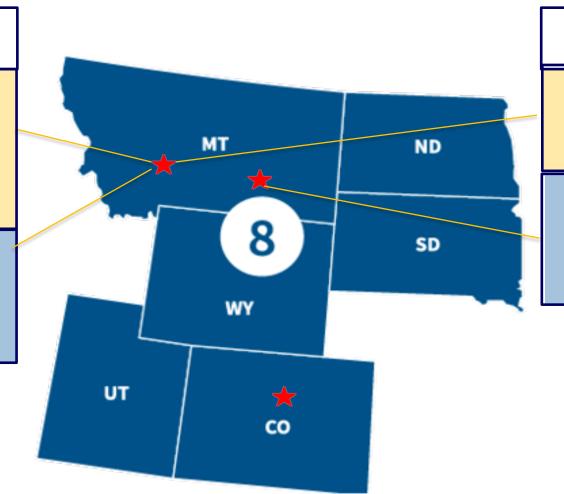
CISA Cyber Security Advisors

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CISA Protective Security Advisors

Randy Middlebrook

Protective Security Advisor (PSA)
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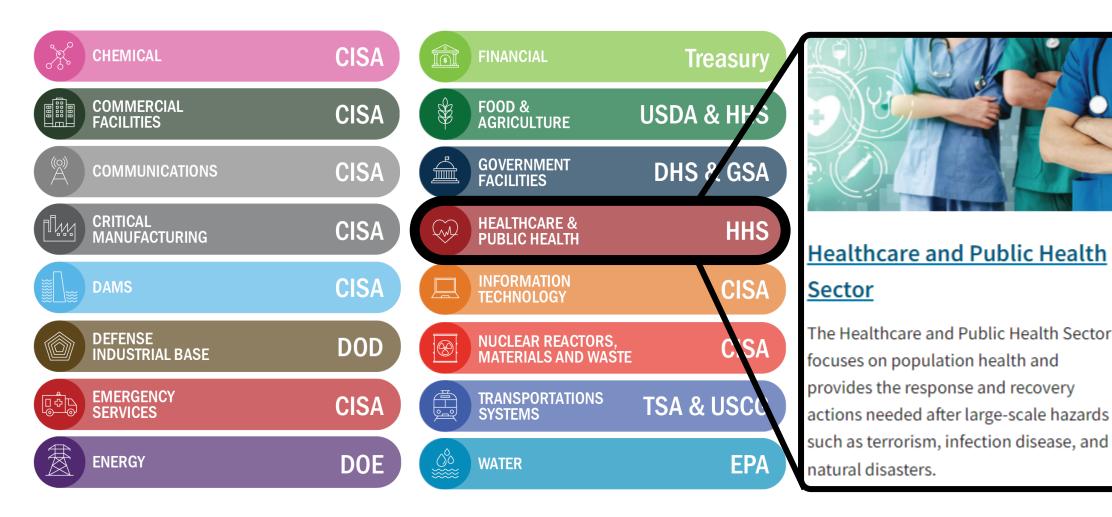
Protective Security Advisor (PSA)

Billings



Joe Frohlich June 10, 2024

16 Critical Infrastructure Sectors & Corresponding Sector Risk Management Agencies





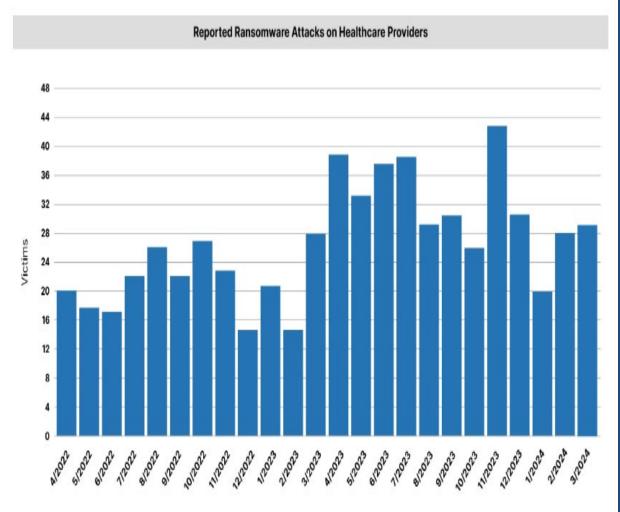
Whose Job is Cybersecurity?



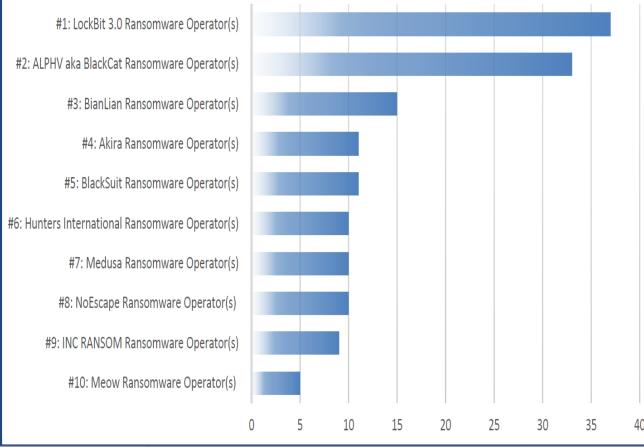


The Threat is Real





HC3'S TOP 10 MOST ACTIVE RANSOMWARE GROUPS (LAST SIX MONTHS)



The Threat is Real – Here in Montana

Montana State University Ransomware Attack, Hackers Steal Over 100GB Data

The cyberattack has disrupted MSU's services, and the University Informati Technology (UIT) team is working to restore the services.



by Ashish Khaitan — May 2, 2023 in Data Breach News, Firewall Daily

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Montana State University Ransomware Attack | The Cyber Express



Montana health record hackers compromise 1.3

By Laura Zuckerman

3 MIN READ



(Reuters) - A data security breach of Montana's state health records has compromised the Social Security numbers and other personal information of some 1.3 million people, but the full extent of damage from the intrusion is unclear, state officials said on Tuesday.

Hackers Compromise 1.3 Montanans Health Records | Reuters





HC3: Analyst Note

January 30, 2023 TLP:CLEAR Report: 202301301200

Pro-Russian Hacktivist Group 'KillNet' Threat to HPH Sector







CISA/HHS Cybersecurity Toolkit

- Released Oct 25th 2023
- Consolidates CISA and HHS resources such as:
 - CISA Cyber Hygiene
 - HHS <u>Health Industry</u>
 <u>Cybersecurity Practices</u>
 (HICP)
 - HPH Sector <u>Cybersecurity</u> <u>Framework Implementation</u> Guide





CISA/HHS Toolkit Homepage



<u>Healthcare and Public</u> <u>Health Sector: Know the</u> <u>Risks, Use Cyber Hygiene</u>

Cybersecurity isn't one size fits all.

Different healthcare entities have distinct strengths and weaknesses and a wide range of needs.

Regardless of where an organization fits into the picture, these resources can help build a cybersecure foundation.



Healthcare and Public Health Sector: Strengthen your Defenses and Mature your Cybersecurity Efforts

CISA offers industry best practices and resources on training and exercises, incident response planning, priority telecoms services, cyber resilience, tackling ransomware and much more to help healthcare organizations strengthen their defenses.



<u>Healthcare and Public</u> <u>Health Sector: Address</u> <u>Resource Constraints</u>

Recognizing that the nation's healthcare systems and providers have been under severe resource constraints—especially since the start of COVID-19—members of the HPH sector should actively take steps to address their constraints.



11

CISA/HHS Toolkit: Cyber Hygiene

<u>Hospital Cyber Resiliency</u> <u>Landscape Analysis</u>

This joint product developed by HHS and industry includes a deeper investigative study into the methods that cyber adversaries are using to compromise US hospitals, disrupt operations, and extort for financial gain.

HPH Sector Cybersecurity Framework Implementation Guide, Version 2

This product was developed jointly by HHS and the HSCC Cybersecurity Working Group, in consultation with the Sector Coordinating Council and Government Coordinating Council to help HPH sector organizations.

<u>Health Industry</u> <u>Cybersecurity Practices</u> (<u>HICP</u>): <u>Managing Threat</u> <u>and Protecting Patients</u>

This product developed jointly by HHS and the HSCC Cybersecurity Working Group outlines the top threats facing the HPH sector and provides recommendations and best practices to prepare and fight against cybersecurity threats.

Healthcare and Public Health Sector Risk Identification and Site Criticality (RISC) Toolkit

The RISC Toolkit is an objective, datadriven, all-hazards risk assessment that can be used by public and private organizations within the HPH Sector to inform emergency preparedness planning, risk management activities, and resource investments.

<u>Security Risk Assessment</u> (<u>SRA</u>) <u>Tool</u>

HHS ONC and OCR developed this risk assessment tool designed to assist small and medium-sized organizations operating in the health care sector to identify and assess security risks within their organization.

Cyber Hygiene Services

Reduce the risk of a successful cyberattack with vulnerability scanning. CISA's Cyber Hygiene Services help secure internet-facing systems from weak configurations and known vulnerabilities and encourages the adoption of best practices.

Known Exploited Vulnerabilities Catalog

This catalog is the authoritative source of cyber vulnerabilities that have been exploited in the wild. By prioritizing known exploited vulnerabilities, healthcare organizations can significantly reduce their likelihood of compromise.

Secure Our World

CISA has just launched Secure Our World, a new cybersecurity awareness program aimed at educating individuals and businesses on four easy ways to stay safe online.



CISA/HHS: Resiliency Landscape Analysis



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CISA/HHS: Resiliency Landscape Analysis

Key Findings

- 1) Growing threat of ransomware
- Variable adoption of critical security features
 - 1) MFA
 - 2) Vulnerability Assessments
 - 3) Training & Outreach
 - 4) Hospital-at-Home
- 3) Email protections are way up! ✓
- 4) Supply chain risk is pervasive
- 5) Medical devices generally aren't targeted



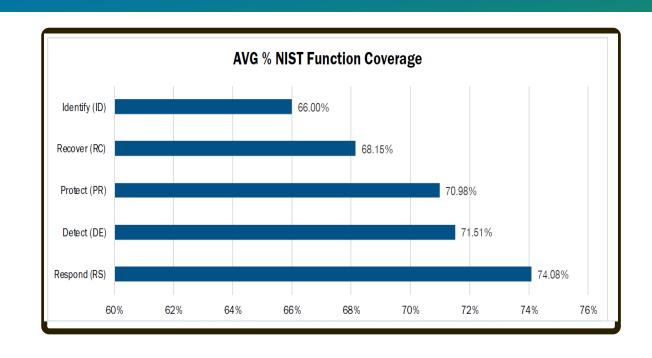


CISA/HHS: Resiliency Landscape Analysis

Key Findings

- 6) Inconsistency across health orgs
- Use of antiquated hardware, software, and systems
- 8) Insurance premiums continue to rise
- Recruiting and retaining cyber talent is a challenge
- 10) Adopting Health Industry

 Cybersecurity Practices works!!





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CISA/HHS: HICP Guide on Managing Threat

Letter from the HHS Deputy Secretary









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	Joe Froh
CISA/HHS Toolkit	June 10, 2
JOA/HHO TOOKII	

Health Industry Cyber Practices



- The Main Document discusses the current cybersecurity threats facing the HPH sector. It sets forth a call to action for the HPH sector, especially executive decision makers, with the goal of raising general awareness.
- Technical Volume 1 outlines the ten HICPs for small healthcare organizations. It is intended for use by IT and/or cybersecurity professionals, it also serves to guide organizations on what to ask their IT and/or cybersecurity teams or vendors.
- Technical Volume 2 outlines the ten HICPs for medium-sized and large healthcare organizations. It is intended for IT and/or cybersecurity professionals.



HICP Main Guide on Managing Threat

Health Industry Cyber Practices

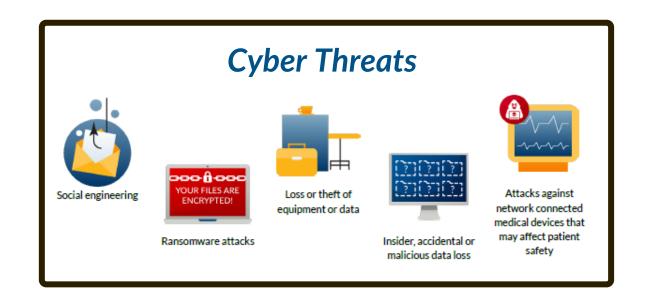
- **CSP 1.** Email Protection Systems
- **CSP 2.** Endpoint Protection Systems
- **CSP 3.** Access Management
- **CSP 4.** Data Protection and Loss Prevention
- **CSP 5.** Asset Management
- **CSP 6.** Network Management
- **CSP 7.** Vulnerability Management
- CSP 8. Security Operation Centers and

Incident

Response

- **CSP 9.** Network Connected Medical Devices
- CSP 10. Cybersecurity Oversight and

Governance





CISA/HHS Toolkit Homepage



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Health Care and Public Health Sector: Address Resource Constraints

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CISA/HHS Toolkit: Strengthen Your Defenses



Healthcare Sector Council Publications

Learn from what has worked well for others in the HPH sector. This site offers resources developed specifically for organizations across healthcare subsectors as best practices prepared by the most sophisticated health industry cyber practitioners.



StopRansomware.gov

CISA hosts the federal government's official one-stop location for resources to tackle ransomware more effectively. This website includes information, guidance, and other tools to help organizations protect, prepare for and respond to ransomware.



Cyber Resource Hub

The Cyber Resource Hub includes information on how to "Get your stuff off search" as well as more complex, non-scalable services such as Cyber Hygiene Vulnerability Scanning, Web Application Scanning (WAS), Phishing Campaign Assessments (PCAs), etc.



<u>Cybersecurity Training and</u> Exercises

Healthcare and public health staff need to know what to do in a cyber incident. CISA helps build a cyber-ready workforce by offering training and education for different groups, including healthcare and public health.



<u>Cyber Incident Response</u> <u>Plan Basics</u>

Every healthcare organization should have an Incident Response Plan that spells out what the organization needs to do before, during, and after an actual or potential security incident.



<u>Free Cybersecurity Services</u> and Tools

This web page offers free services from CISA and our industry partners, starting with basic steps to take immediately and building up to more complex actions and resources.



<u>Priority</u> <u>Telecommunications</u> Services

To ensure reliable communications when circuits are congested, CISA offers GETS for priority access to local and long distance calls on landline networks and WPS for prioritized wireless calling on nationwide and several regional cellular networks.



Communications and Cyber Resiliency Toolkit

CISA developed an interactive graphic for those who are responsible for communications networks to help evaluate current resiliency capabilities, identify ways to improve resiliency, and develop plans for mitigating the effects of potential threats.



CISA/HHS Toolkit Homepage



<u>Healthcare and Public</u> <u>Health Sector: Know the</u> <u>Risks, Use Cyber Hygiene</u>

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CISA/HHS Toolkit: Address Resource Constraints

Healthcare and Public Health Sector: Address Resource Constraints

Recognizing that the nation's healthcare systems and providers have been under severe resource constraints—
especially since the start of COVID-19—members of the Healthcare and Public Health (HPH) sector should actively
take steps to address their constraints.

Use free or low-cost services to make near-term improvements when resources are scarce

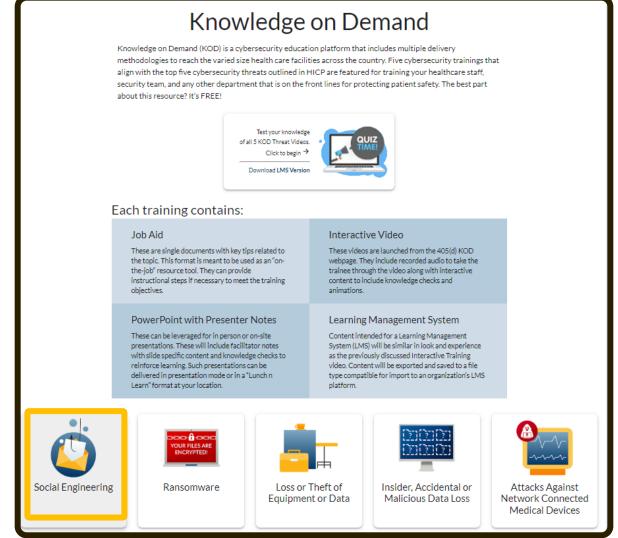
The tools and resources offered by CISA in this toolkit are available at no cost. In addition, HHS hosts Knowledge or

Demand (KOD) a free cybersecurity education platform that includes multiple delivery methodologies to reach health care facilities of all sizes across the country.





CISA/HHS Toolkit: Knowledge On Demand





CISA/HHS Toolkit: Knowledge On Demand





Sampling of Voluntary & No-Cost Cybersecurity Offerings

Assessments & Evaluations

- Strategic
 - Healthcare Cybersecurity Performance Goals (CPGs)
 - Cyber Resilience Review (CRR™)
 - Cyber Resilience Essentials (CRE)
 - Cyber Infrastructure Survey (CIS)
 - External Dependencies Management (EDM)
 - Cyber Security Evaluation Tool (CSET™)
- Technical
 - Vulnerability Scanning (CyHy)
 - Remote Penetration Test (RPT)
 - Risk and Vulnerability Assessment (RVA)

Preparedness Activities

- Tabletop Exercises
- Security Alerts, Tips and other updates (US-Cert)
 - National Cyber Awareness System
 - ICS-Cert
 - Known Exploited Vulnerabilities (KEV)
- Informational Products and Recommended Practices
- Outreach, Work group collaboration
- Cyber Exercises and Workshops
- Cybersecurity Training and Webinars
- Guides and "Playbooks"
- National Cybersecurity Workforce Framework
- October Cybersecurity Awareness Month

Incident Response Assistance

- Incident Coordination
- Joe Frohlich
- Malware Next Gen Analysis June 10, 2024



https://hphcyber.hhs.gov/performance-goals.html

Protected Critical Infrastructure Information Program

Protected Critical Infrastructure Information (PCII) Program Guards Your Information

Sensitive critical infrastructure information voluntarily given to

CISA is protected by law from

- Public release under Freedom of Information Act requests,
- Public release under State, local, tribal, or territorial disclosure laws,
- Use in civil litigation and
- Use in regulatory purposes.
- To learn more, visit <u>www.dhs.gov/pcii</u>





Cyber Performance Goals - Healthcare

Cyber Performance Goals (CPGs) Assessment:

 Voluntary guidelines tailored to Healthcare organizations



10 <u>Essential</u> Goals establish a floor of safeguards that will better protect from cyber attacks, improve response when events occur, and minimize residual risk



10 Enhanced Goals provide a path to reach the next level of defense needed to protect against additional attack vectors



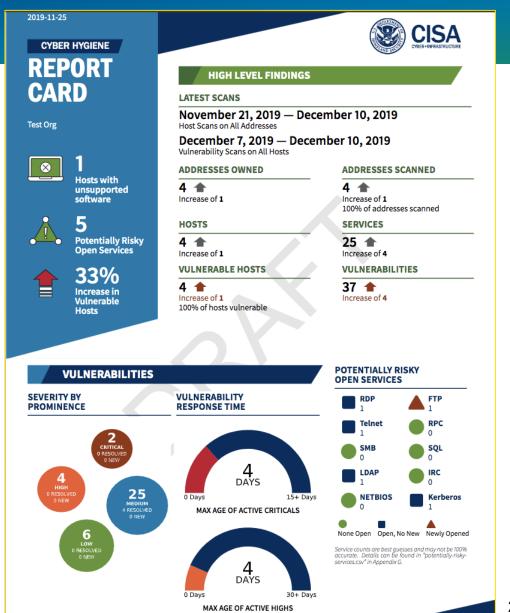


Vulnerability Scanning

- Automated scanning of External-facing, Internet accessible systems (Top 1000 Ports, can include cloud sites)
- Weekly report card that includes current scan results, historic trends, Known Exploited Vulnerabilities, and comparisons to the national average
- Helps you understand your unique exposure
- Know what the Internet already knows about your environment!



Sign up by emailing
vulnerability@cisa.dhs.gov
with subject line
"Requesting Cyber Hygiene Services"



#StopRansomware

RESOURCES

NEWSROOM

ALERTS

REPORT RANSOMWARE

CISA.GOV









Ransomware is a form of malware designed to encrypt files on a device, rendering any files and the systems that rely on them unusable.

Malicious actors then demand ransom in exchange for decryption.

StopRansomware.gov is the U.S. Government's official one-stop location for resources to tackle ransomware more effectively.

Cyber Tabletop Exercises (CTTX)

- Use CISA Tabletop Exercise Packages (CTEP) to help develop your own
 - Healthcare & Public Health Sector Cyber CTEP Situation Manual
 - Industrial Controls CTEP Situation Manual
 - Ransomware CTEP Situation Manual
 - Ransomware Third Party Vendor CTEP Situation Manual
 - Vendor Phishing CTEP Situation Manual
 - Healthcare and Public Health Suicide Bomber CTEP Situation Manual
 - October 25, 2023 Statewide Healthcare Cyber Incident Response TTX in Missoula – over 40 organizations joined!



Protective Security Advisor (PSA)



- **INFRASTRUCTURE SURVEY TOOL** Identifying facilities' physical security, security forces, security management, information sharing, protective measures, and dependencies related to preparedness, mitigation, response, resilience, and recovery;
- Assist Visit Identifies and recommends protective measures at facilities, provide comparison across like assets, and track implementation of new protective measures.
- Infrastructure Visualization Platform (IVP) brings a facility's digital floorplans to life by placing on it 360° panoramic photographs, immersive video, geospatial information, and hypermedia data of critical facilities, surrounding areas, and transportation routes that assist with security planning, protection, and response efforts.
- SAFE Tool The Security Assessment at First Entry (SAFE) tool is designed to assess the current security posture and identify options for facility owners and operators to mitigate relevant threats



CISA Protective Security Advisors

Information Sharing Opportunities



Join H-ISAC: Health
Information Sharing and
Analysis Center

About H-ISAC



Health Sector Cybersecurity
Coordination Center (HC3) |
HHS.gov



Healthcare Sector Coordinating
Council Cybersecurity Working
Group - Health Sector Council





Cyber406 strives to improve Montana's cybersecurity defensive posture across private and public sectors by increasing the state's ability to prevent, identify, and eradicate cyber threat vulnerabilities through a systematic approach of Collaboration, Operations, Education, and Research.





https://www.cyber406.org/

Incident Reporting

Montana Analysis and Technical Information Center (MATIC): 406-444-1318

CISA Central 24x7 contact number: 888-282-0870

Report an Incident: www.cisa.gov/forms/report



The need to Work Together

To secure the entire network (IT and OT), we need to work together. Realize the importance of each network and strive for safety, security and reliability



 Schedule a Monthly/Quarterly Senior leadership brief on cyber risk and potential impacts to your organization.



CISA - MT Contacts

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For more information, visit **CISA.gov** or contact **central@cisa.dhs.gov**