

Cybersecurity & Avoiding Identity Theft

Dark Web, Social Engineering, & Scams

Tobi West, PhD

March 2025

bit.ly/CSUF-OLLI-March2025



Tobi West



PhD

Cyber Defense, Dakota State University



Cybersecurity Professor

Technology Department Chair, Coastline College



Cyber Center Director

National Center of Academic Excellence in Cybersecurity

www.tobiwest.com



Topics

01

Intro

Key threats

02

Identity Theft

Definition and types

03

Impact

Real-world consequences

04

Protecting Yourself

Best practices

05

Responding

Immediate actions

06

Resources

For further learning

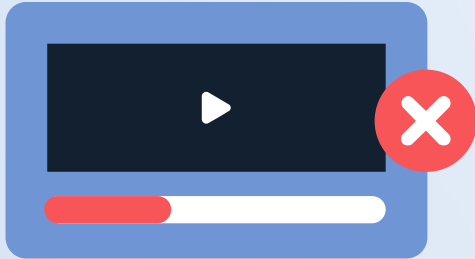
Access the slides

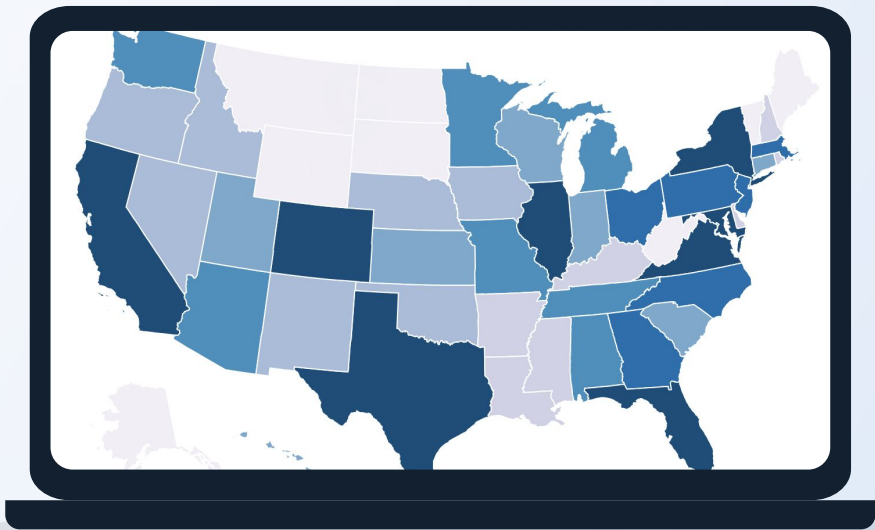


01

Introduction

Cybersecurity & Identity Theft





457,398

Cybersecurity job openings
in the United States

www.cyberseek.org



Cybersecurity

The practices, technologies, and processes designed to protect digital systems, networks, and sensitive information from cyber threats.

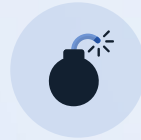


Importance of Cybersecurity



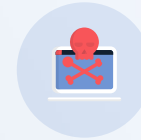
Cyberattacks

Threats and attacks are continually on the rise



Data

Personal and financial data continues to increase in value



Impact

Individuals, businesses, and governments

Motives for Cyberattacks

Political



Protest

Angry /
Interfere with
elections

Financial



Money

Small scale to
large scale

Status



Fame

On the dark web
or public
acknowledgement

Espionage



Sabotage

Trade secrets
Technical
schematics

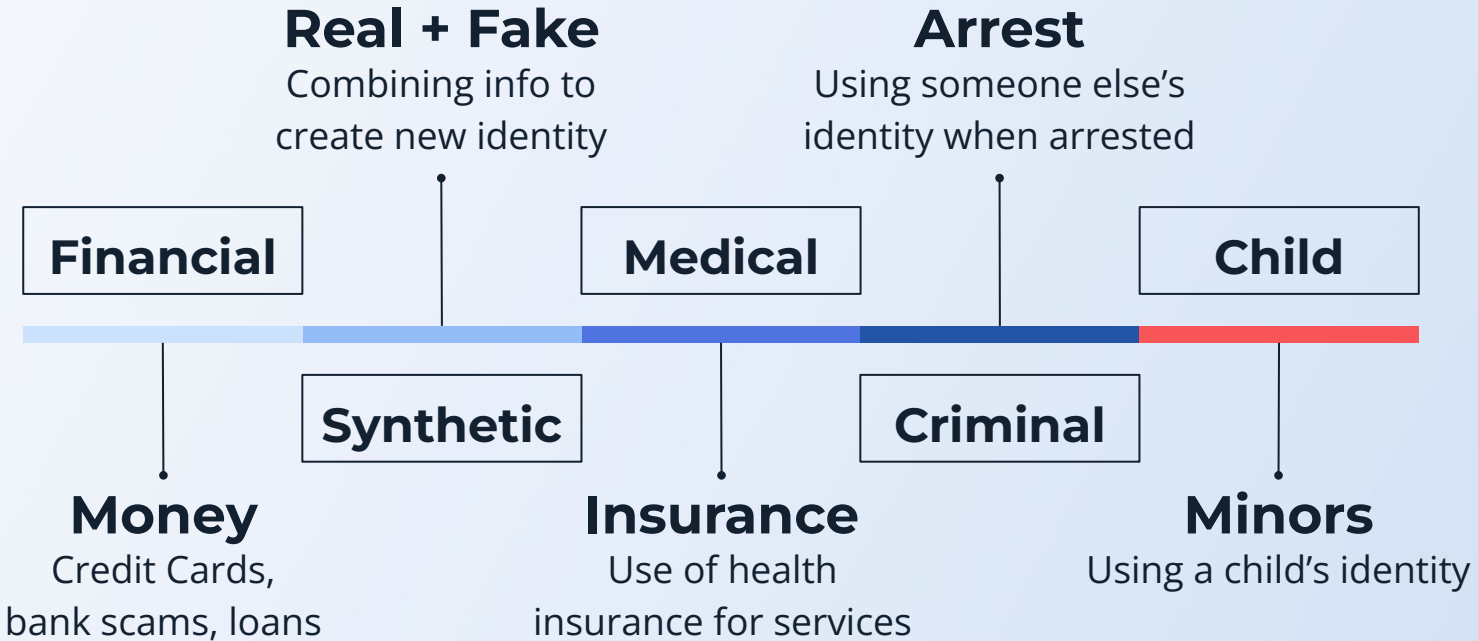


ID Theft

Occurs when someone unlawfully uses another person's personal information for fraud or deception.

(e.g., name,
Social Security number,
credit card information)

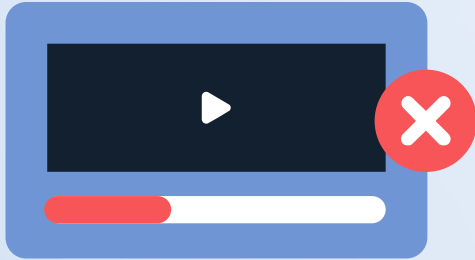
Types of Identity Theft



02

Identity Theft

Key terms



2.6M Cases

\$12.5B in fraud loss

1.1M Cases

FTC IdentityTheft.gov



Understanding ID Theft



Phishing

“Friendly” email to steal login credentials



Smishing

Fake text and phone calls to trick victims



Data Breaches

Exposure of records (e.g., Equifax, Target)



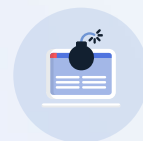
Social Engineering

Manipulating people to get sensitive info



Skimming

Devices placed on ATMs and gas pumps to get credit card info



Weak Passwords

Reusing passwords on multiple sites makes them vulnerable

Surface Web

YAHOO!
Google
reddit
CNN.com
bing

Deep Web

Academic databases
Medical records
Financial records
Legal documents
Some scientific reports
Some government reports
Subscription only information
Some organization-specific repositories

Dark Web

TOR
Political protest
Drug trafficking
and other illegal activities

96%

of content on the
Web (estimated)

Dark Web

Common web browser

No login required

Common web browser

Login required

Special web browser

Login/no login

Seller

Criminals sell personal data, credit card numbers, and Social Security numbers

Examples

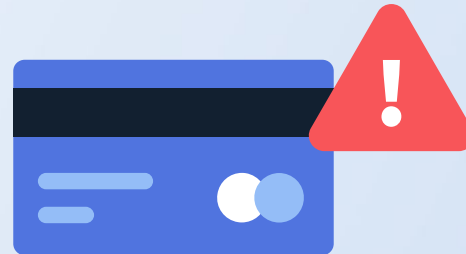
\$5 for credit card number

\$250 for medical record (\$1-\$1,000)



Buyer

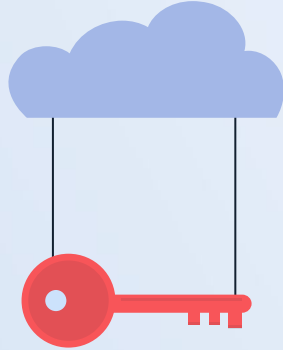
Uses the stolen data for fraud, blackmail, and identity theft



03

Impact

Consequences of identity theft



Personal Consequences



Financial Loss

Unauthorized transactions, loans, & debts in your name



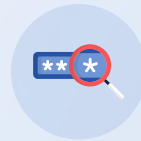
Legal Issues

May have to prove your innocence



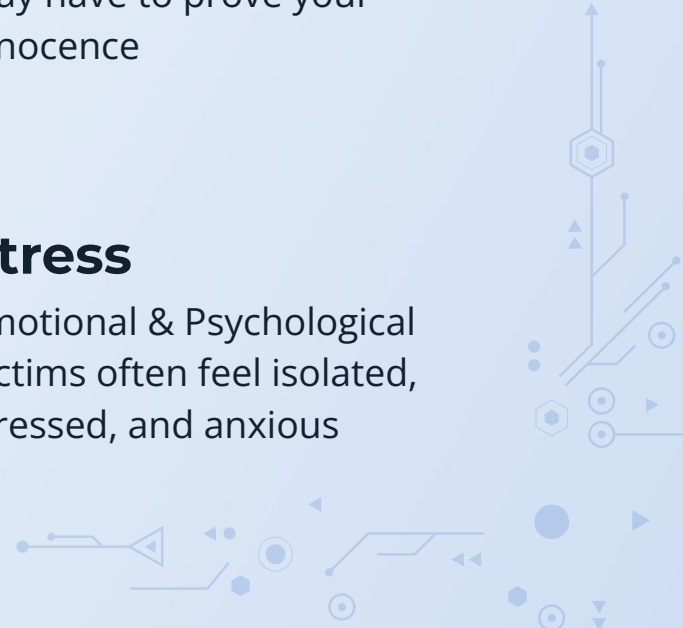
Credit Damage

Lower credit score, difficulty getting loans



Stress

Emotional & Psychological
Victims often feel isolated, stressed, and anxious

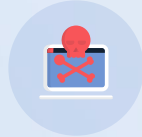


Business & Organizational



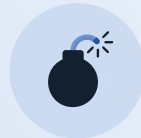
Legal & Compliance Issues

Companies face lawsuits if they fail to protect customer data



Reputation Damage

Loss of customer trust after a data breach



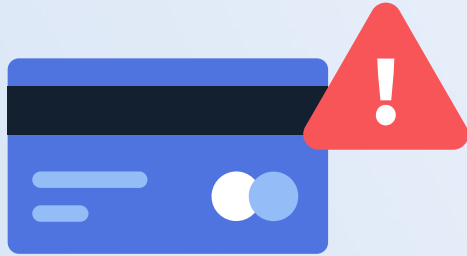
Operational Disruptions

Cyberattacks can shut down business operations

04

Protecting Yourself

Against identity theft



Best Practices for Individuals



MFA

Strong passwords & multi-factor authentication



Stop...Think

Never click on suspicious links in email or texts



Lock Screen

Secure personal devices



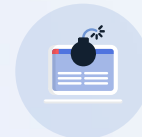
Updates

Software, operating systems, & anti-virus software



Monitor

Check financial accounts, credit reports, & use monitoring service



Freeze Credit

When necessary to prevent accounts from being opened

Cyber Scams



Identity Theft Protection

| | lost wallet protection | 24x7 support | reimbursement |
|--|-------------------------|------------------------------|------------------|
| | Credit score monitoring | Court records & bookings | Banks |
| | Dark Web monitoring | US Postal Service (redirect) | Sex offenders |
| | Social media monitoring | SSN (addresses) | Driver's license |

Aura | Lifelock | Identity Guard

10 Day Security Fix

| REVIEW / EDIT / DEL | REMOVAL & OPT OUT | MINDSET |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Make 3 lists: devices, accounts, people | Data Brokers | Secure & Skeptical |
| Reused passwords: change Old accounts: edit & delete Previous posts: review & delete Social media: privacy setting | Search your name Search your address This can take time | Freeze/Monitor Credit VPN Temporary CC number Keep devices & apps updated |

!@#\$ PASSWORDS %^&*

Longer passwords are better. Avoid top 100.

Try Bitwarden. It's free!

- Use consumer reports to find pw manager
- Share passwords across devices
- Create strong passwords
- Audit passwords

Passwords can still end up on the darkweb!

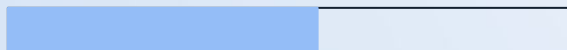
Use multi-factor authentication.



Best Practices for Business

Awareness Training

Cybersecurity training for employees



Strong Security Policies

Using encryption and secure password policies



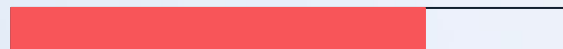
Security Audits

Identify and mitigate vulnerabilities



Data Protection

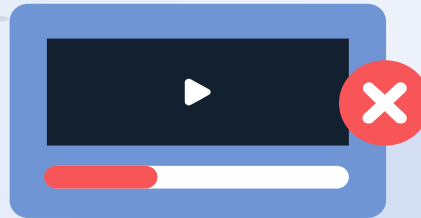
Encrypt sensitive information & secure servers



05

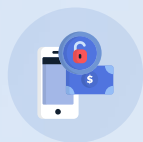
Responding

To Identity Theft



Immediate Actions

Bank & Cards



Contact

Call to report fraudulent transactions

Credit Bureau



Alert

Place a fraud alert or freeze your credit

Police & FTC



Report

Contact law enforcement & [IdentityTheft.gov](https://www.identitytheft.gov)

Bank & Credit



Monitor

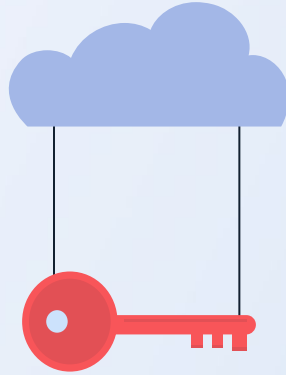
Watch for further unauthorized activity

Dispute

Fraudulent charges and accounts

Repair

Work to recover your credit score



Prevent

Avoid future incidents



06

Resources

Takeaways and further learning



Key Takeaways

- Use strong, unique passwords & enable multi-factor authentication (MFA)
- Monitor your credit reports and financial statements regularly
- Freeze your credit if you're not applying for loans or credit
- Be cautious of phishing scams and social engineering tactics
- Avoid sharing personal information over email, text, or phone calls



Government & Law Enforcement Resources

- [IdentityTheft.gov \(FTC\)](https://www.identitytheft.gov)
 - Official Federal Trade Commission (FTC) site for reporting identity theft.
 - Provides step-by-step recovery plans.
- **USA.gov - Identity Theft**
 - Government guide on preventing and responding to identity theft.
- **Federal Trade Commission (FTC) - Consumer Information**
 - Information on identity theft prevention and fraud alerts.
- **Social Security Administration (SSA) - Identity Theft Help**
 - Steps to take if your Social Security number is stolen.
- [FBI Cyber Crime Division \(Internet Crime Complaint Center - IC3\)](https://www.fbi.gov/interior/cyber)
 - Report cybercrime and identity theft-related fraud.
- **US Department of Justice (DOJ) - Identity Theft**
 - Legal guidance and identity theft protection tips.

Credit Monitoring & Fraud Alerts

- AnnualCreditReport.com
 - The only **official** site to get a **free credit report** from Equifax, Experian, and TransUnion once a year.
- **Credit Bureaus (for Fraud Alerts & Freezes):**
 - **Equifax - (1-888-298-0045)**
 - **Experian - (1-888-397-3742)**
 - **TransUnion - (1-800-680-7289)**

Non-Profit & Consumer Protection

- [Identity Theft Resource Center \(ITRC\)](#)
 - Free victim assistance and education.
- **Better Business Bureau (BBB) Scam Tracker**
 - Report identity theft scams.
- [Privacy Rights Clearinghouse](#)
 - Information on privacy protection and identity theft prevention.
- [National Cybersecurity Alliance \(NCSA\)](#)
 - Cybersecurity tips and identity theft prevention resources.

Dark Web & Data Breach Monitoring

- [Have I Been Pwned](#)
 - Check if your email or personal data has been leaked in a data breach.
- **Dark Web Monitoring Services:**
 - **Experian Dark Web Scan** (Experian)
 - **Norton LifeLock Dark Web Monitoring** (Norton)
 - **Identity Guard** ([Identity Guard](#))

ID Theft Protection & Recovery Services

- [LifeLock by Norton](#)
 - Paid identity theft monitoring and recovery services.
- [ID Watchdog](#)
 - Identity theft resolution and credit monitoring.

Cybersecurity is everyone's responsibility.

Stay aware, stay secure!



Thanks

Tobi West, PhD
Technology Department Chair
Cyber Center Director

twest20@coastline.edu
www.coastline.edu/cybercenter
www.cybertechgirls.org

