Cyber Security Issues for Employee Benefit Plans

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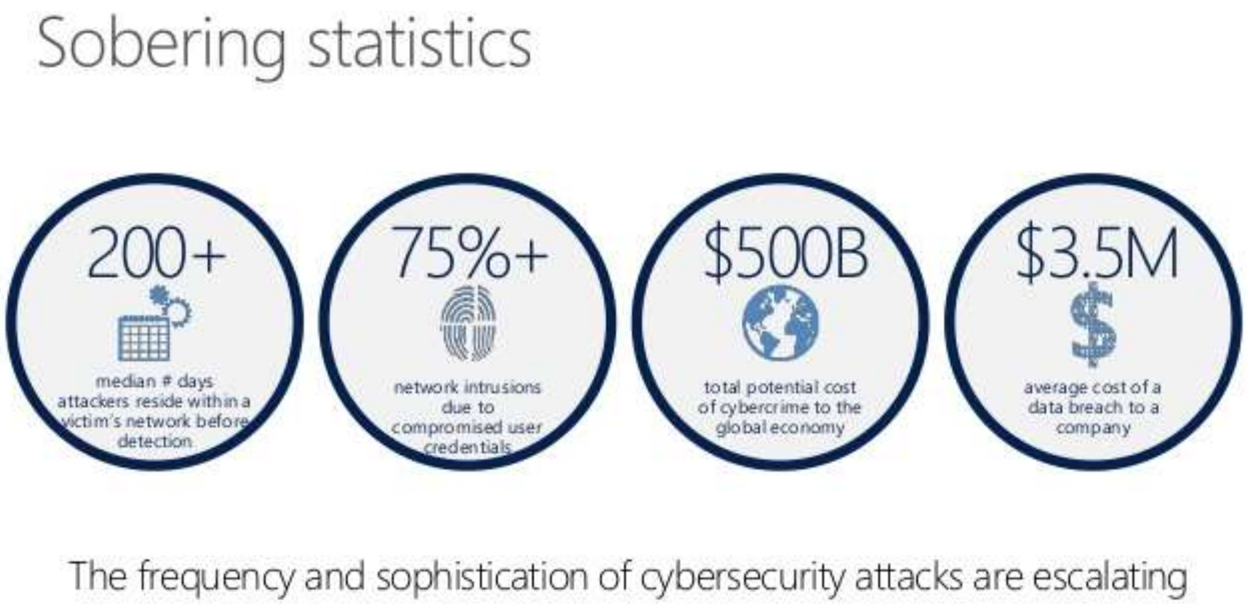
BIO

CODY GRIFFIN, CPA, CITP, CISA
RISK ASSURANCE & IT ADVISORY PARTNER
Cody began his career in the risk assurance and advisory practice of PricewaterhouseCoopers and joined HoganTaylor in 2013. He is a CPA, CITP and CISA with over 14 years of experience in both public and private industry. Cody's industry experience includes information technology, telecommunications, retail, financial institutions, energy, higher education and transportation. His areas of practice include Sarbanes-Oxley (SOX) Section 404, IT audit, business process reviews, service organization control audits (SSAE 16), Fraud reviews, agreed upon procedures, internal audit assurance services and compliance audits. Cody leads firm in providing "Attack & Penetration" services, which assists HoganTaylor clients in identifying vulnerabilities in their IT infrastructure. Cody graduated from Oklahoma State University with a B.S. in Accounting and received his M.B.A. from Texas Tech University in Management Information Systems.

Session Overview

- Statistics Update
- Training Employees to Properly Handle Data
- Managing Risk
- What to Do When a Breach Occurs
- How to Manage the Weak Links

Statistics



Sobering statistics

200+

median # days attackers reside within a victim's network before detection

75%+

network intrusions due to compromised user credentials

$500B

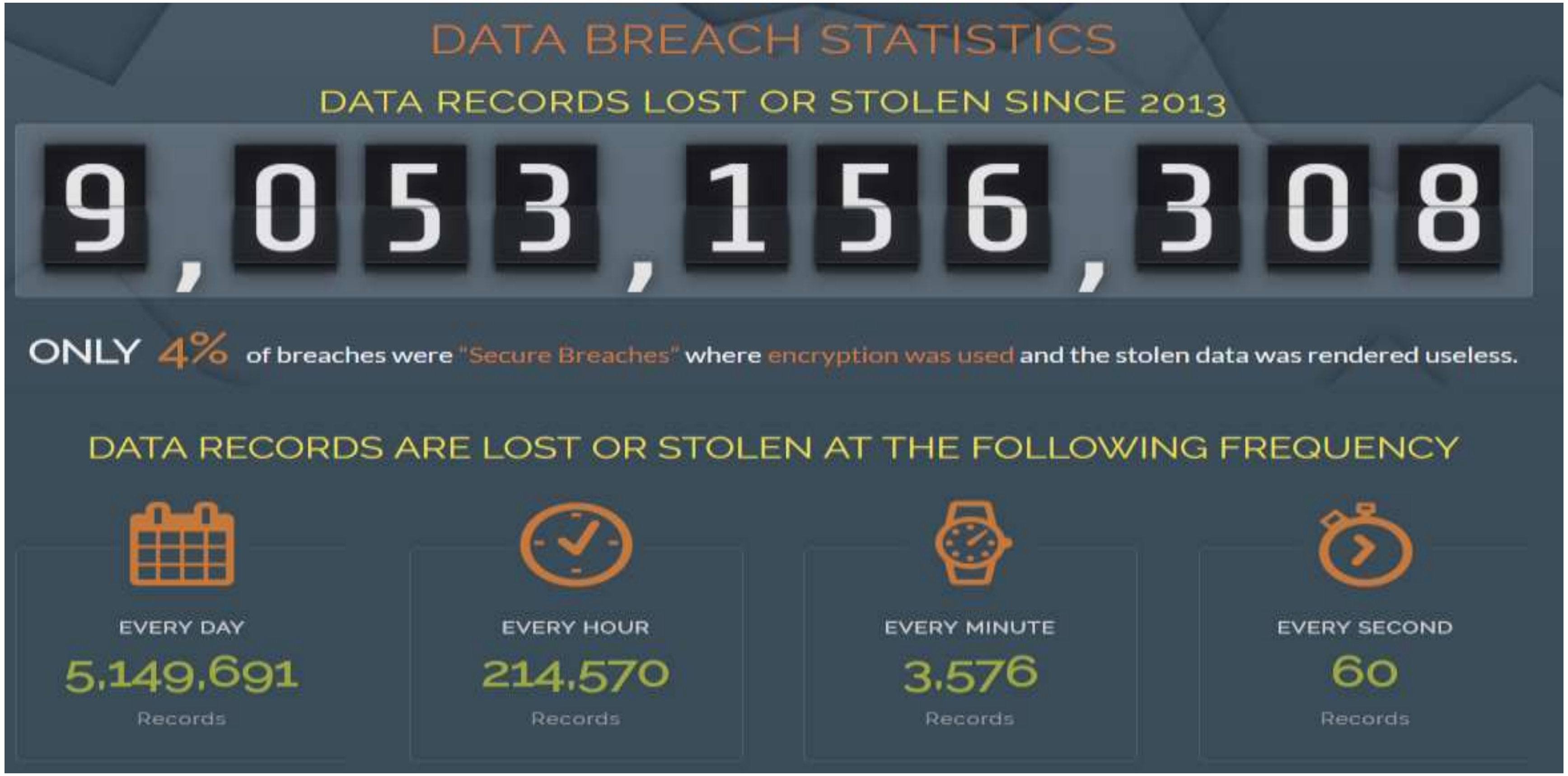
total potential cost of cybercrime to the global economy

$3.5M

average cost of a data breach to a company

The frequency and sophistication of cybersecurity attacks are escalating

Data Breaches



DATA BREACH STATISTICS

DATA RECORDS LOST OR STOLEN SINCE 2013

9,053,156,308

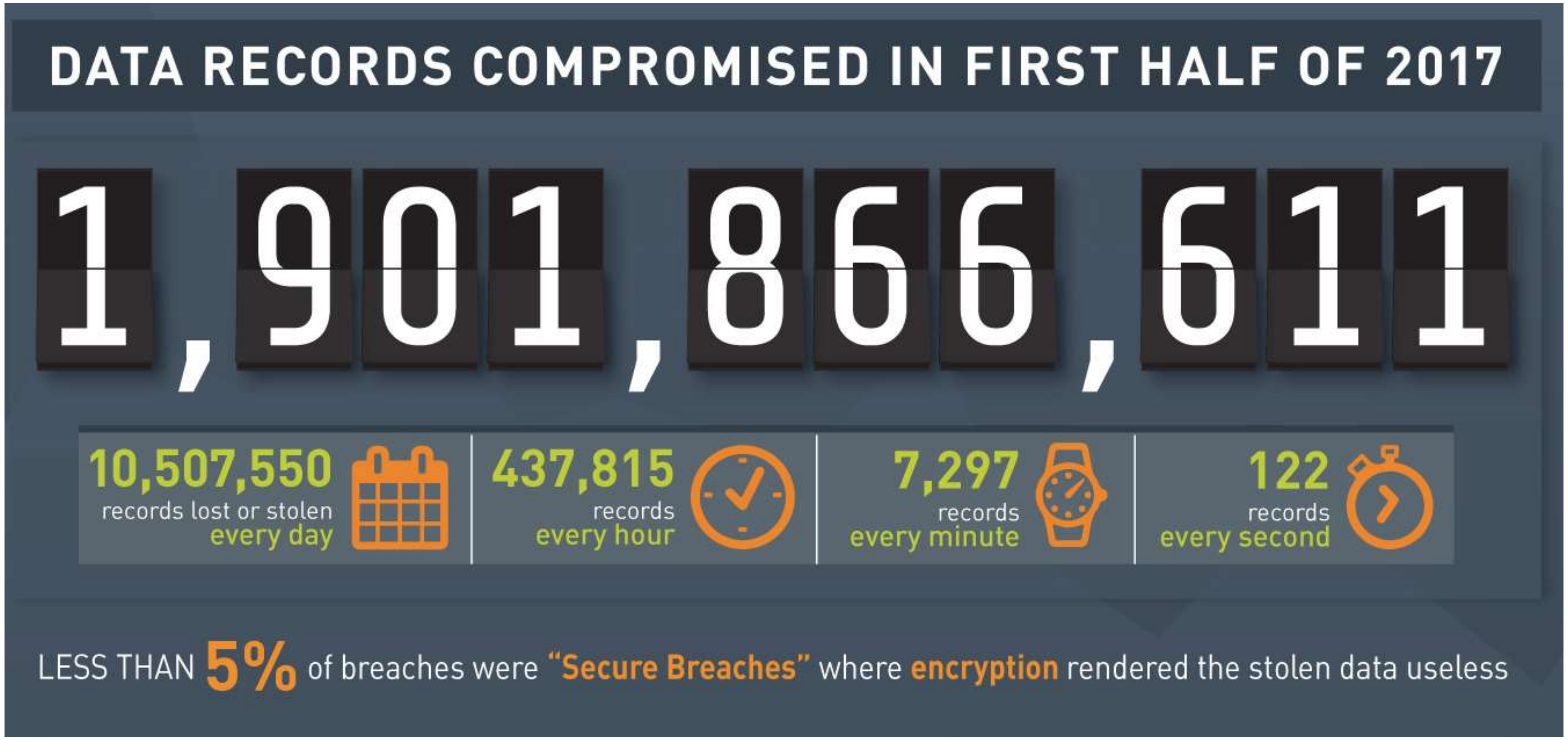
ONLY 4% of breaches were "Secure Breaches" where encryption was used and the stolen data was rendered useless.

DATA RECORDS ARE LOST OR STOLEN AT THE FOLLOWING FREQUENCY

EVERY DAY	EVERY HOUR	EVERY MINUTE	EVERY SECOND
5,149,691 Records	214,570 Records	3,576 Records	60 Records

Statistics presented are based on the Breach Level Index [breachlevelindex.com]

Data Breaches



DATA RECORDS COMPROMISED IN FIRST HALF OF 2017

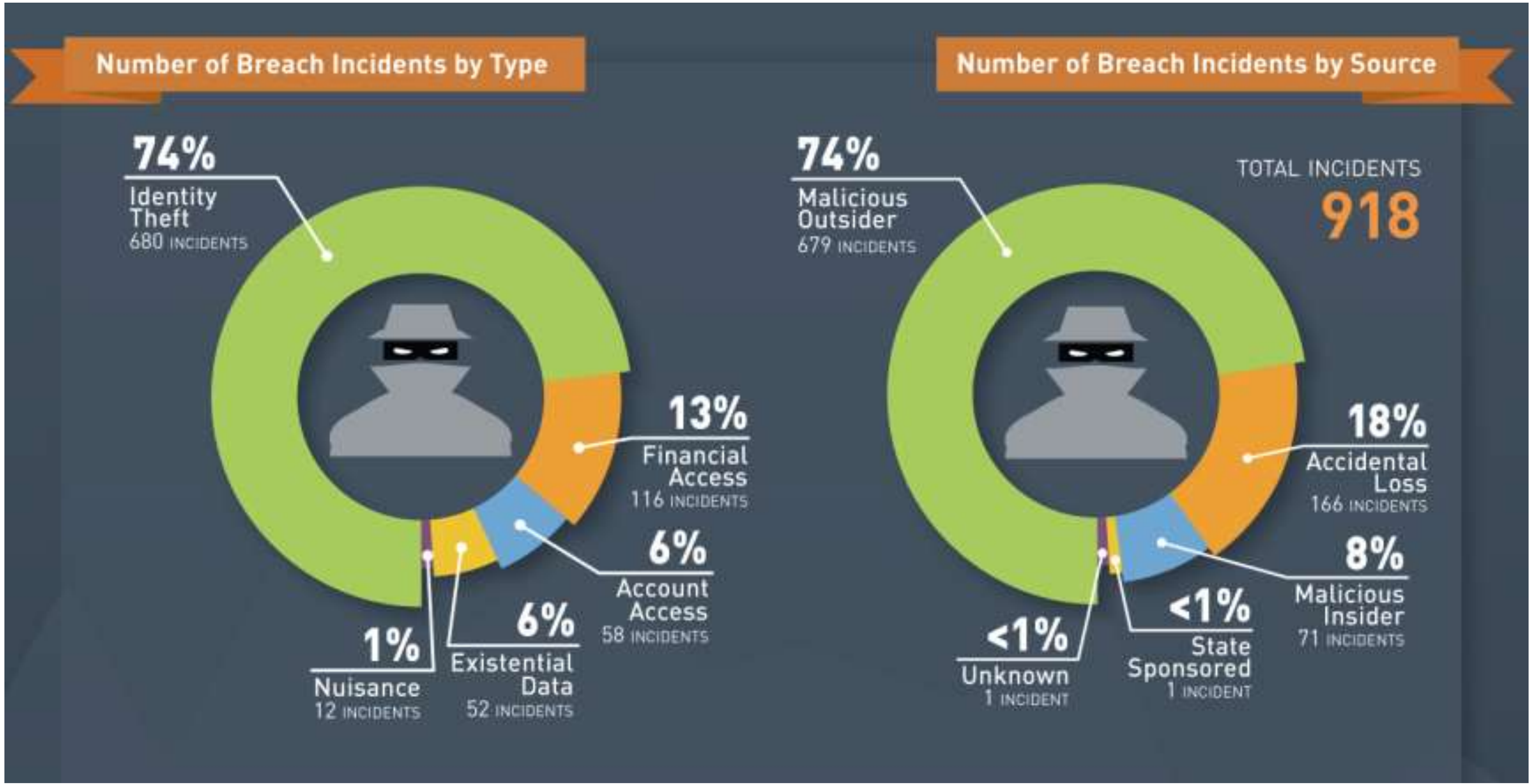
1,901,866,611

10,507,550 records lost or stolen every day	**437,815** records every hour	**7,297** records every minute	**122** records every second

LESS THAN **5%** of breaches were **"Secure Breaches"** where **encryption** rendered the stolen data useless

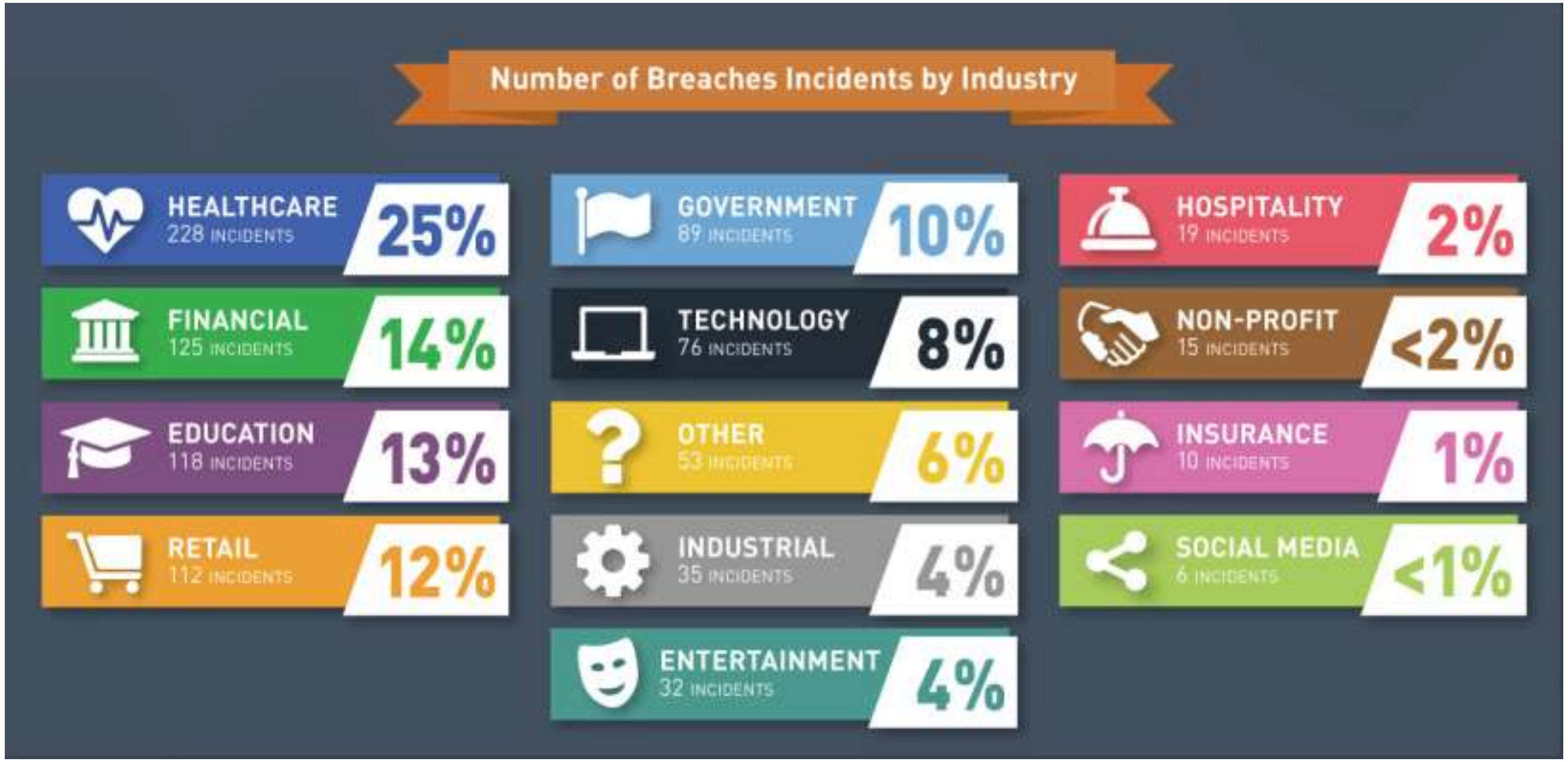
Statistics presented are based on the Breach Level Index [breachlevelindex.com]

Data Breaches



Statistics presented are based on the Breach Level Index [breachlevelindex.com]

Data Breaches



Number of Breaches Incidents by Industry

HEALTHCARE	228 INCIDENTS	25%
FINANCIAL	125 INCIDENTS	14%
EDUCATION	118 INCIDENTS	13%
RETAIL	112 INCIDENTS	12%
GOVERNMENT	89 INCIDENTS	10%
TECHNOLOGY	76 INCIDENTS	8%
OTHER	53 INCIDENTS	6%
INDUSTRIAL	35 INCIDENTS	4%
ENTERTAINMENT	32 INCIDENTS	4%
HOSPITALITY	19 INCIDENTS	2%
NON-PROFIT	15 INCIDENTS	<2%
INSURANCE	10 INCIDENTS	1%
SOCIAL MEDIA	6 INCIDENTS	<1%

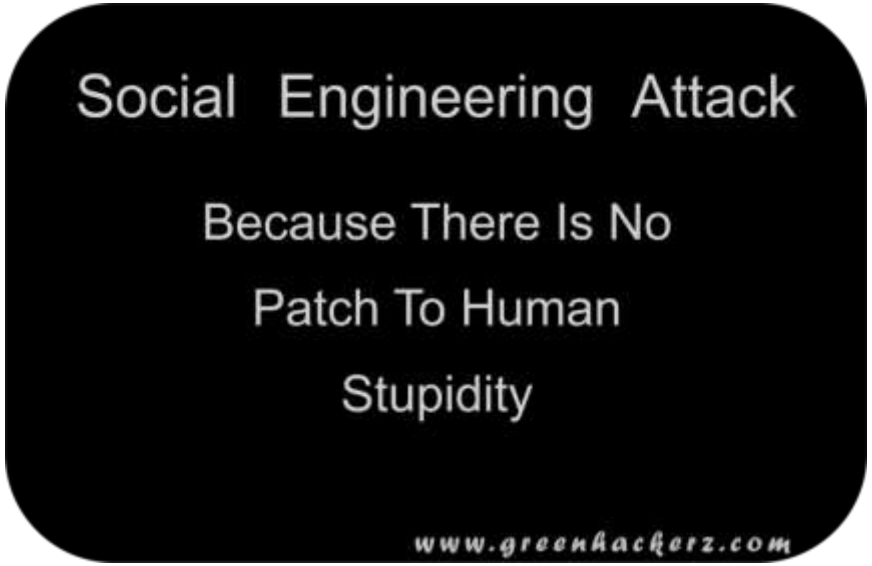
Statistics presented are based on the Breach Level Index [breachlevelindex.com]

Training Employees

To Properly Handle Data

ASK
THE RIGHT
QUESTIONS

Social Engineering



Social Engineering Attack

Because There Is No
Patch To Human
Stupidity

www.greenhackerz.com

JUST SAY NO!

Managing Risk

Responsibility for Cyber Security Resides with Us!

REQUIREMENTS
RULES
STANDARDS
LAW
COMPLIANCE
GOVERNANCE
POLICIES
TRANSPARENCY
REGULATIONS

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10 CYBERSECURITY QUESTIONS TO CONSIDER

1. Has your organization defined and prioritized your most valuable information assets?

Where is your data?

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10 CYBERSECURITY QUESTIONS TO CONSIDER

2. Has your organization developed a cross-functional cybersecurity risk advisory committee?

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3. Have you performed vulnerability and penetration tests on the organization’s network within the past year?

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4. Does your organization provide annual or more frequent cybersecurity education and training to your employees?

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10 CYBERSECURITY QUESTIONS TO CONSIDER

5. Does your organization have an incident response plan in place?

Do you have an incident response plan?

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Special Publication 800-61
Revision 2

Computer Security
Incident Handling Guide

Recommendations of the National Institute of Standards and Technology

Paul Cichonski
Tom Millar
Tim Grance
Karen Scarfone

http://dx.doi.org/10.6028/NIST.SP.800-61r2

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10 CYBERSECURITY QUESTIONS TO CONSIDER

6. Is your current budget for information security hardware, software, and services more than 10% of your overall IT budget?

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7. Is your organization’s network monitored 24/7/365 via a Security Operations Center?

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10 CYBERSECURITY QUESTIONS TO CONSIDER

8. Do you have a policy for patching?

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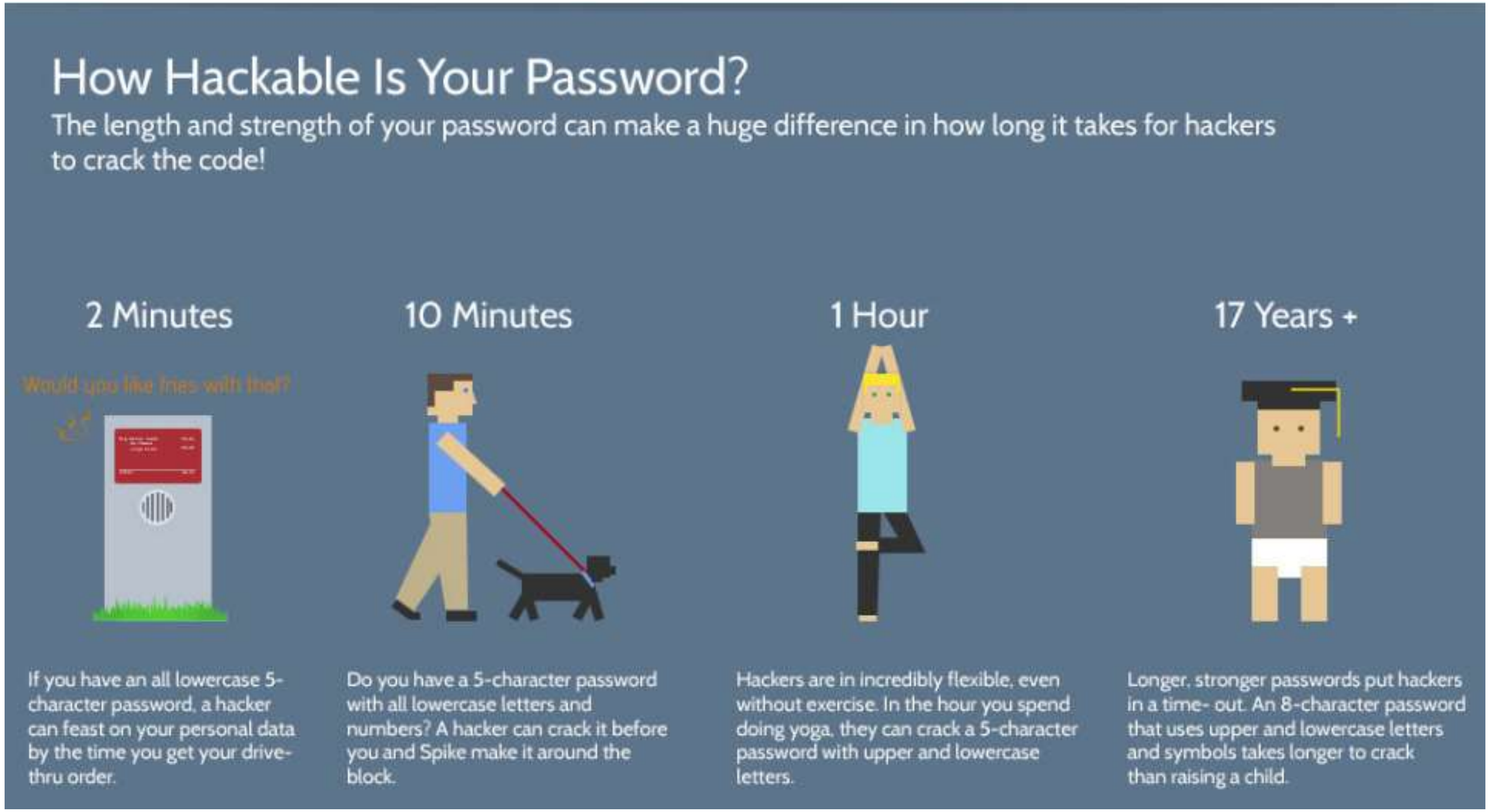
9. Do you require multi-factor authentication?

What can we do?



How Hackable Is Your Password?

The length and strength of your password can make a huge difference in how long it takes for hackers to crack the code!

2 Minutes

If you have an all lowercase 5-character password, a hacker can feast on your personal data by the time you get your drive-thru order.

10 Minutes

Do you have a 5-character password with all lowercase letters and numbers? A hacker can crack it before you and Spike make it around the block.

1 Hour

Hackers are in incredibly flexible, even without exercise. In the hour you spend doing yoga, they can crack a 5-character password with upper and lowercase letters.

17 Years +

Longer, stronger passwords put hackers in a time- out. An 8-character password that uses upper and lowercase letters and symbols takes longer to crack than raising a child.

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10 CYBERSECURITY QUESTIONS TO CONSIDER

10. Do you regularly evaluate your cybersecurity risk management program and the effectiveness of its controls?

Third Party Service Providers

SOC for Cybersecurity

What it covers

- Cyber controls as described by an organization's enterprise-wide cyber risk management program.

Report Components

- A description of the entity's cyber risk management program.
- Opinion on the effectiveness of controls within the program to achieve the entity's cybersecurity objectives. (Security, Availability, Confidentiality)

SOC for Cybersecurity, Cont.

Intended Usage

- General use – management and board members, analysts, investors, clients/prospects, business partners and industry regulators.

Distribution

- Unrestricted

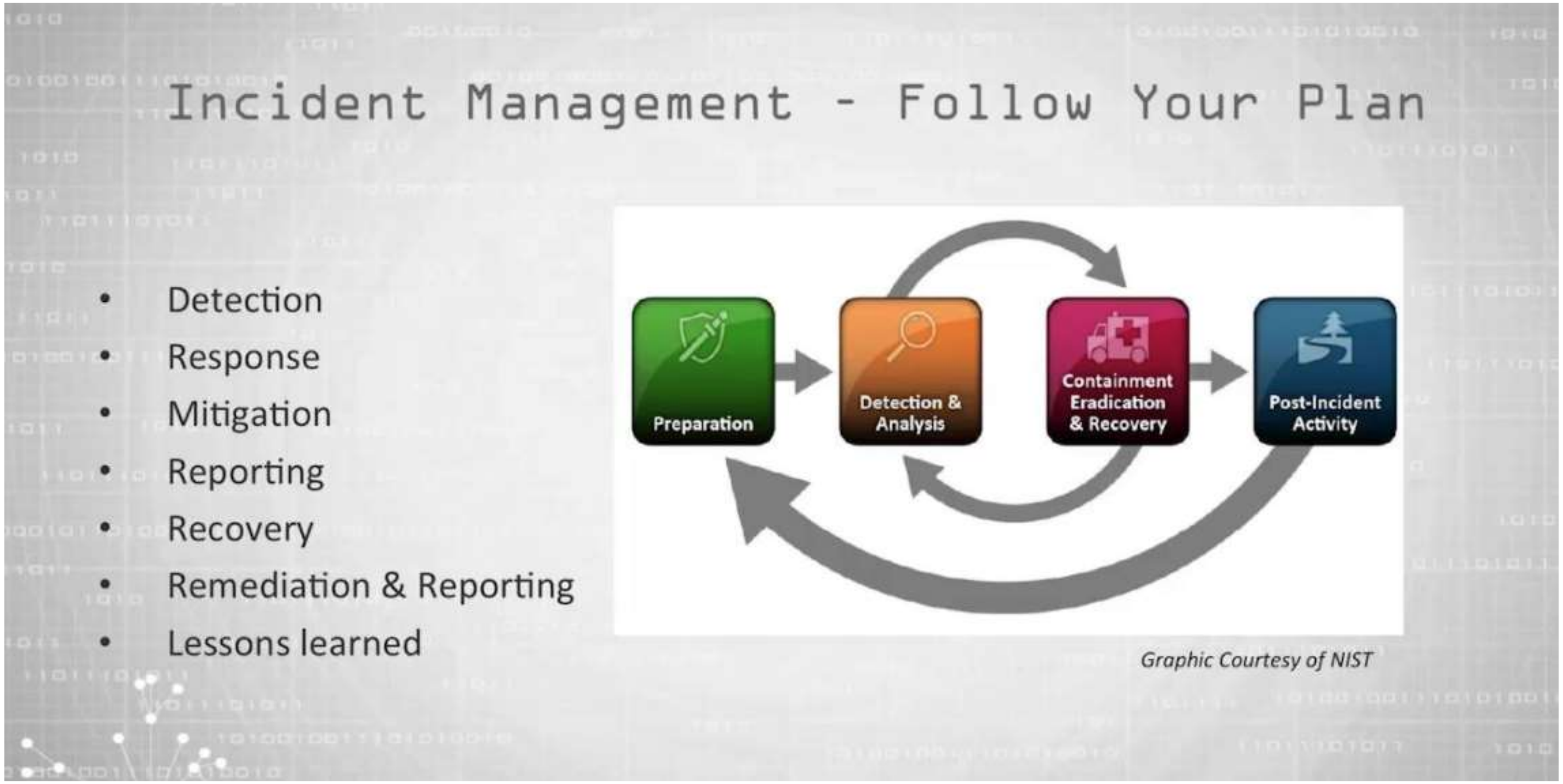
Explore Cyber Liability Insurance

Understand what your general business insurance policy does and does not cover.

Cyber liability insurance helps mitigate the administrative, technological and legal costs of a data breach.

Can help provide experienced attorneys, forensic experts and public relations professionals?

What to do When a Breach Occurs!



Incident Management - Follow Your Plan

- Detection
- Response
- Mitigation
- Reporting
- Recovery
- Remediation & Reporting
- Lessons learned

Preparation → Detection & Analysis → Containment Eradication & Recovery → Post-Incident Activity

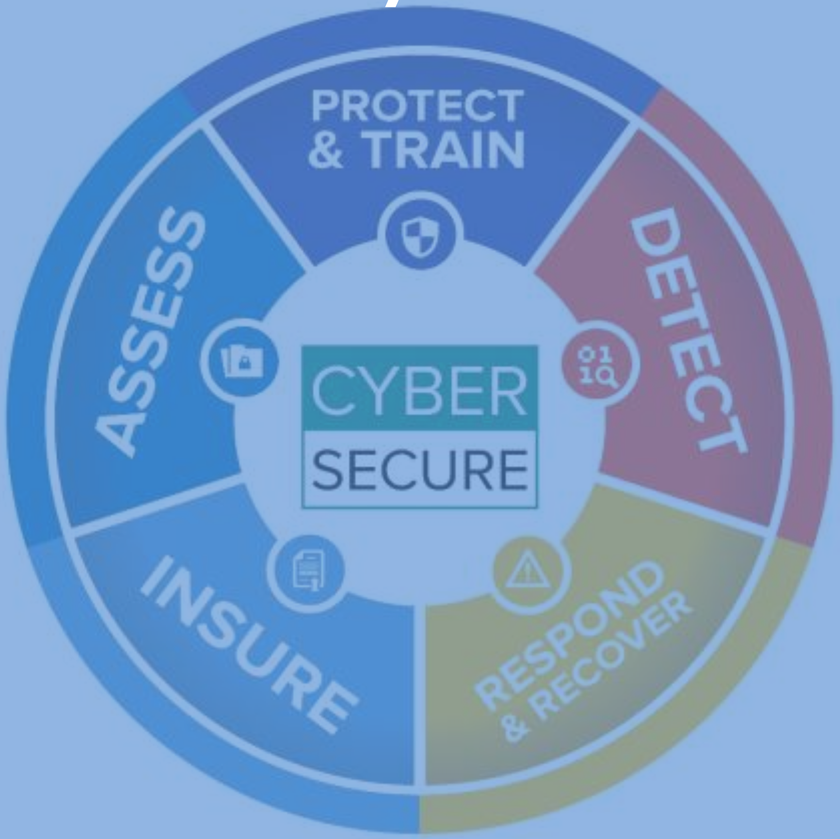
Graphic Courtesy of NIST

Contact the Authorities!

How to Manage the Weak Links!

Training! Training! Training!

Are you Cyber Secure?



Good Luck!

Questions / Contact Information

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