





# Cyber Insurance Deep Dive: Best Practices and Q&A

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# **Agenda**

- 1. CYBER THREAT LANDSCAPE
- 2. CYBER INSURANCE 101
- 3. BEST PRACTICES
- 4. Q&A





# CYBER THREAT LANDSCAPE



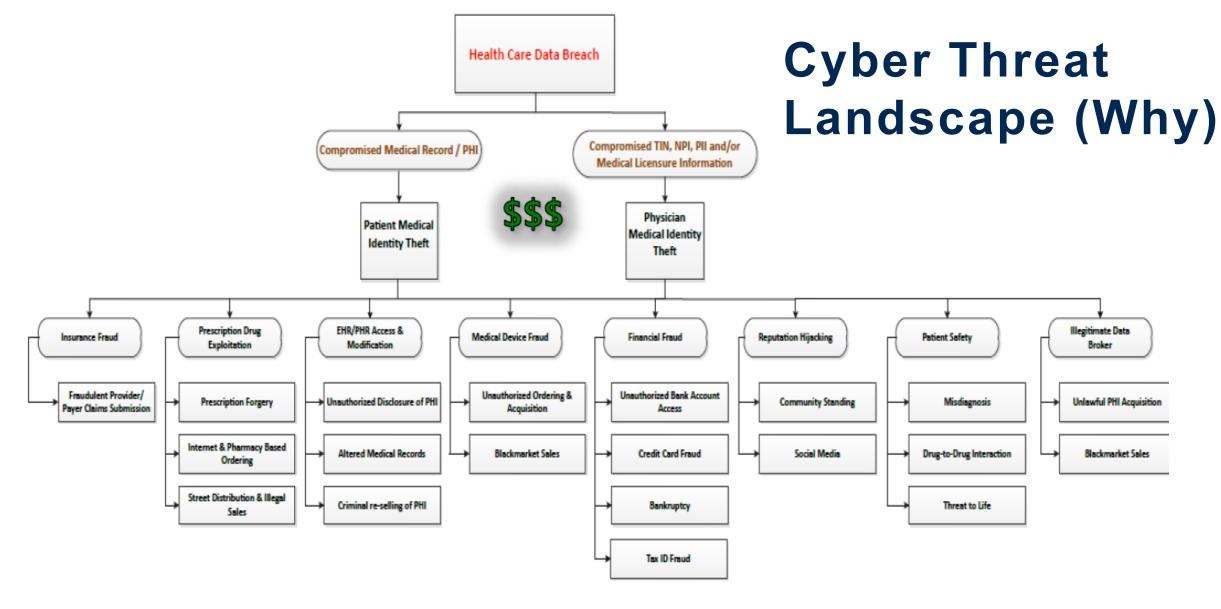
# Cyber Threat Landscape (Who)

#### **TYPES OF BAD ACTORS**

- APT
- Organized Crime
- Industrial Spies
- Hackers
  - Script Kiddies
  - Worm/Virus Writers
  - Black & White Hat
- Hacktivists
- Insiders









# Cyber Threat Landscape (How)



# Cyberattacks now cost companies \$200,000 on average, putting many out of business

PUBLISHED SUN, OCT 13 2019-10:30 AM EDT | UPDATED MON, MAR 9 2020-11:37 AM EDT





- Forty-three percent of cyberattacks are aimed at small businesses, but only 14% are prepared to defend themselves, according to Accenture.
- These incidents now cost businesses of all sizes \$200,000 on average, reveals insurance carrier Hiscox.
- More than half of all small businesses suffered a breach within the last year.
- Sixty percent will go out of business within six months of being victimized.
- Cyber crime will cost businesses \$5.2 trillion worldwide within five years --- Accenture.



# 2023 FBI Cyber Crime Report

## Losses Attributed to Subjects per Destination State\*

Rank	State	Loss
1	California	\$1,450,468,117
2	New York	\$659,190,424
3	Florida	\$460,557,456
4	Texas	\$436,917,629
5	Washington	\$197,573,721
6	New Jersey	\$162,556,627
7	Pennsylvania	\$161,290,998
8	Illinois	\$160,429,405
9	Arizona	\$143,931,864
10	Georgia	\$138,867,559

#### **IC3 COMPLAINT STATISTICS**

#### LAST FIVE YEARS

Over the last five years, the IC3 has received an average of 758,000 complaints per year. These complaints address a wide array of Internet scams affecting individuals across the globe.<sup>3</sup>



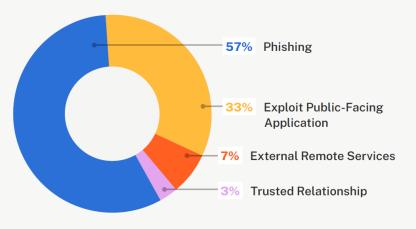
# Industry Spotlight: Healthcare

\$10.1 million

Average total cost of a **data breach** for healthcare organizations<sup>1</sup>

## Cyber Claims in the Healthcare Industry by Attack Vector

KEY INSIGHT —— Phishing isn't associated with one event type; it's simply how attackers get into a system. Once inside, they can pursue all sorts of malicious activities, which is why phishing is the leading attack vector for all cyber claims.



Source: Coalition forensics survey data

#### **Claims Insights**

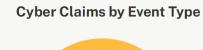
It's just a little security incident. How bad could it be?

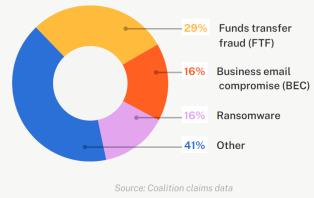
\$134,000

Average cost of a cyber insurance claim for healthcare organizations

#### **Claim Examples**

ORGANIZATION	EVENT TYPE	LOSS
Patient-Centered Medical Home	Funds Transfer Fraud	\$500,000
Behavioral Health Services	Business Email Compromise	\$125,000
Medical Equipment	Ransomware	\$275,000





**KEY INSIGHT** — Although it's not the leading event type, the average ransomware loss for organizations in the healthcare industry is nearly \$355,000.

#### **UNIQUE EXPOSURES**

- PHI
- EMR SYSTEMS
- IOT MEDICAL DEVICES
- PAYMENT PROCESSING
- TELEMEDICINE
- END OF LIFE HARDWARE/SOFTWARE
- PATIENT PORTALS
- BIOMETRIC DATA

IBM Security, Cost of a Data Breach Report 2023

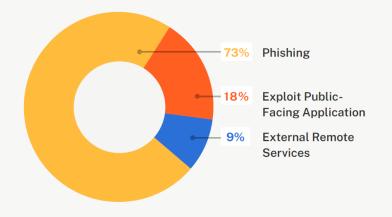
# Industry Spotlight: Non-Profit

## \$2.6 million

Average total cost of a **data breach** for nonprofit organizations<sup>1</sup>

## Cyber Claims in the Nonprofit Industry by Attack Vector

KEY INSIGHT —— Phishing isn't associated with one event type; it's simply how attackers get into a system. Once inside, they can pursue all sorts of malicious activities, which is why **phishing is the leading attack vector for all cyber claims.** 



Source: Coalition forensics survey data

#### **Claims Insights**

It's just a little security incident. How bad could it be?



Average cost of a cyber insurance claim for nonprofit organizations

#### Claim Examples

ORGANIZATION	INCIDENT	LOSS
Veterans Charity	Funds Transfer Fraud	\$125,000
Social Services	Business Email Compromise	\$155,000
Rehabilitation Center	Ransomware	\$962,000



#### **UNIQUE EXPOSURES**

- SOCIAL MEDIA
- DMS
- ONLINE FUNDRAISING
- PII (DONORS, BOARD MEMBERS & VOLUNTEERS)
- CASE MANAGEMENT
- GRANT APPLICATIONS

# Industry Spotlight: Public Entity



## \$2.3 million

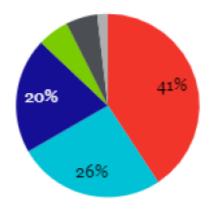
Average cost of a data breach for a public sector entity

#### **UNIQUE EXPOSURES**

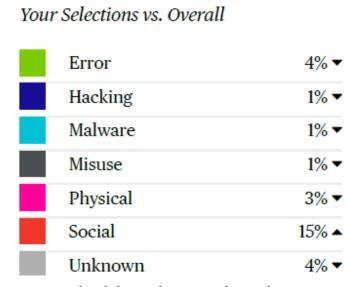
- TAX PAYER DATA (PFI, PII, PHI)
- CLASSIFIED DOCUMENTS
- LIMITED TECHNOLOGY/IT SECURITY BUDGET
- APT/HACKTIVIST TARGETS
- INSIDER THREAT

# Actions Causing Cyber Incidents Since 2009

Global, Public Entity and \$25.1M to \$150M

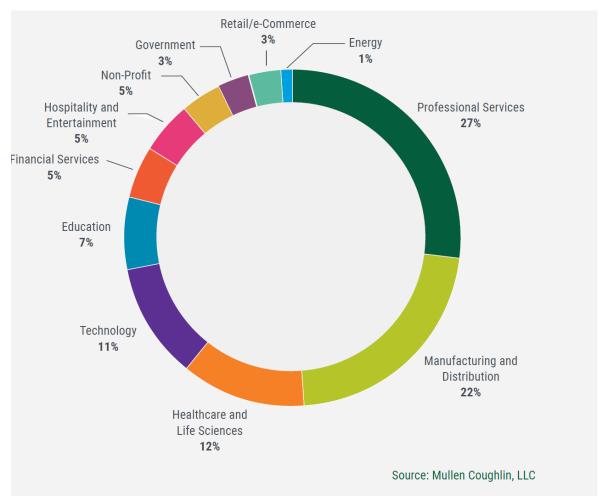


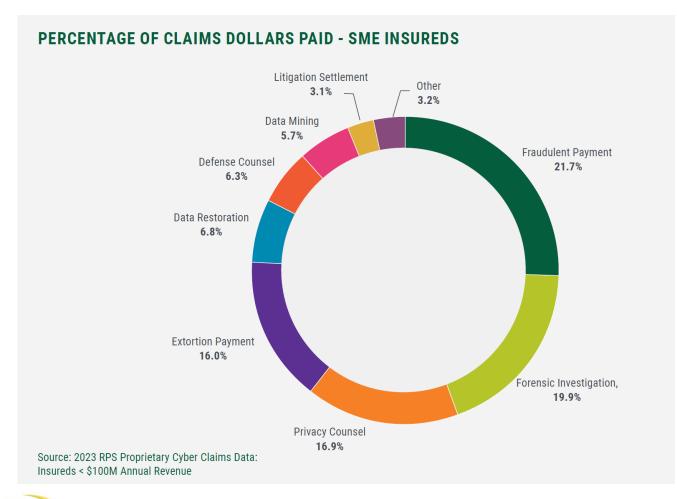
\* The data set contains negative or zero value.



Chubb Cyber Risk Index

# Ransomware Activity by Industry

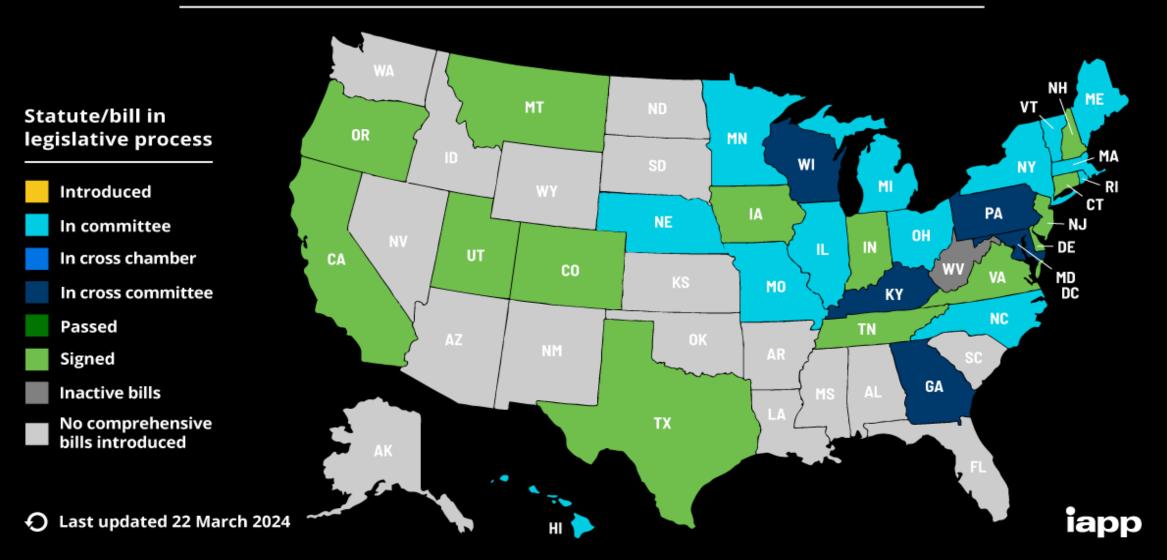






## Increased Privacy Laws = Increased Need for Cyber Insurance

# **US State Privacy Legislation Tracker 2024**



# **Cyber Threat Landscape**

PA BREACH OF PERSONAL INFORMATION NOTIFICATION ACT

- Applies to: Any state agency, political org, individual or business in PA that maintains, stores, or manages computerized PI data of PA residents
- Pl includes: first & last name in combo with SS#, DL#,DL, bank/credit/debit card numbers in combo with credentials
- Obligated to Notify
- Fines Calculated: \$1,000 X
- [# of individuals who should have been notified]



#### Pennsylvania Attorney General Sues Uber Over Data Breach

By Rahul Mukhi & Kal Blassberger on March 14, 2018

POSTED IN BREACH NOTIFICATIONS, CYBERSECURITY

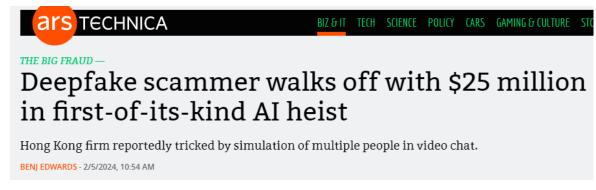
Last week, Pennsylvania's Attorney General sued Uber for allegedly failing to provide timely notice to its drivers that their personal identifying information ("PII") had been compromised in a data breach in 2016. The lawsuit seeks \$13.5 million in penalties against Uber—\$1,000 for each of the 13,500 Pennsylvanian Uber drivers whose driver's license information was accessed by hackers. The complaint alleges that, in violation of Pennsylvania's data breach notification law, [1] Uber failed to provide notice "without

# **Generative AI & Cyber Security**



3.4M Talent Gap for Skilled Cybersecurity Professional





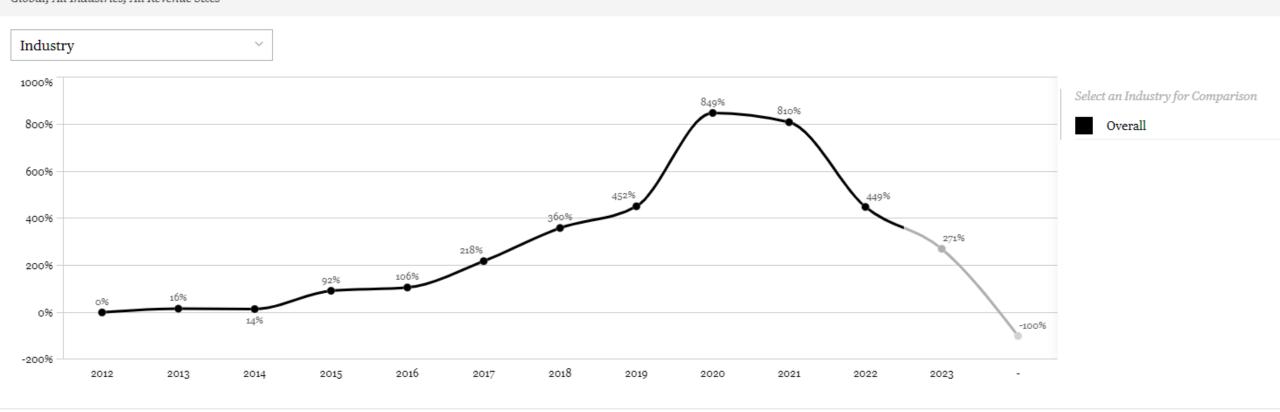


# Global Cyber Incident Growth

Industries

Revenue Size

#### Global Incident Growth Compared to 2012\* Global, All Industries, All Revenue Sizes



<sup>\*</sup> Please note - this data is indexed against the base line year of 2012 and current year shown in grey is a projection.



# CYBER INSURANCE 101



# What is Cyber Insurance?



POST-BREACH V.S. PRE-BREACH



# **Cyber Liability Terminology**

## **STRUCTURE**

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VALID UNTIL	05/20/23	05/20/23	05/05/23
ADMISSION STATUS	Non-Admitted	Non-Admitted	Admitted
ISSUING INSURER	CFC Underwriting Limited	North American Capacity, Arch	Clear Blue Insurance
AM BEST RATING Financial strength rating	A (Excellent)	A+ (Superior) A- (Excellent)	A- (Excellent)
AGGREGATE LIMIT  Maximum amount paid by the insurance company for the duration of the policy	\$1,000,000	\$1,000,000	\$1,000,000
RETENTION The same as a deductible, the amount of a claim you pay	\$2,5001	\$10,000¹	\$10,000¹



# **Cyber Liability Terminology FIRST PARTY**

	NOTIFICATION COSTS  Cost to notify affected individuals after a data breach	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	BREACH COSTS INSIDE/OUTSIDE Will the breach costs erode the aggregate limit (inside) or are separate (outside)	Outside	Outside	Inside	Inside
Ж	BUSINESS INTERRUPTION Covers lost profits incurred due to not operating	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
FIRST PARTY COVERAGE	BI WAITING PERIOD  Minimum duration of business interruption before coverage starts	8 hours	8 hours	8 hours	8 hours
	CONTINGENT BUSINESS INTERRUPTION Losses from an interruption in 3rd party computer services or software	\$1,000,000	\$1,000,000	\$100,000	\$1,000,000
正	DATA RECOVERY The cost of recovering lost data	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	EXTORTION/RANSOMWARE Covers damage and ransom payments from an attack	\$1,000,000	\$1,000,000	\$500,000	\$1,000,000
	BRICKING When computers and electronic hardware are damaged beyond repair	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000



# **Cyber Liability Terminology**

## **THIRD PARTY**

NETWORK SECURITY AND PRIVACY LIABILITY Third party liability costs	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
PCI Covers fines or penalties imposed by banks or credit card companies	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
REGULATORY In case you're fined by regulators (e.g., for breaching consumer privacy)	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
MEDIA When your content triggers legal action against you (e.g libel, plagiarism)	\$1,000,000	\$1,000,000	\$0	\$1,000,000



# **Cyber Liability Terminology CYBER CRIME**

COMPUTER FRAUD  Covers funds or property stolen resulting from a hack	\$250,000¹	\$250,000¹	\$100,000¹	\$250,000¹
FUNDS TRANSFER FRAUD  When a criminal deceives a bank/institution to transfer funds	\$250,000¹	\$250,000¹	\$100,000¹	\$250,0001
SOCIAL ENGINEERING When cyber criminals deceive a business to transfer funds willingly	\$250,000¹	\$250,000'	\$100,0001	\$250,000'



## **Pre Incident Service Providers**



# Insurer Cyber Risk Services Only 10% of policyholders use provided risk services Using Additional Services Not Using Additional Services Not Using Additional Services 2024 US Market Outlook Published February 2024

#### Loss Mitigation Services: Partner Contacts

Company	Primary Service Capability
BitSight	Network Security
Cofense	Security Education & Awareness
CrowdStrike	Endpoint Security
Dashlane	User Account Security
Fidelis Cybersecurity	Response Planning
FireEye	Security Operations
NetDiligence	Network Security
RSM	Compliance
Skillbridge	Security Education & Awareness
StealthBits	User Account Security





\$6,000 Market Value

Evolve teamed up with specialist cybersecurity experts to help strengthen, improve, and protect your organization. Each Evolve policyholder has the benefit of using the following services at no additional cost:



#### **EVOLVE MGA'S MOBILE APP**

#### THREE CRUCIAL RISK MANAGEMENT SERVICES FOR POLICYHOLDERS + MORE

#### 24/7 Dark Web Monitoring



 Our mobile app monitors the Dark Web around the clock, alerting you of any stolen credentials tied to your organization in real time.

#### · Network Deep Scanning

 We continuously scan your network for surface vulnerabilities like exposed RDP ports, notifying you if we uncover risks that are leaving your business exposed to hackers.

#### Phishing Simulation Campaigns

 Educate your staff and gain valuable organizational insights by running simulated phishing campaigns designed to challenge your employees' cyber awareness.

\*In addition to these risk management tools, our app allows insureds to directly message our forensic experts, and even notify a claim directly in the app,\*



#### BLACKFOG

#### ON DEVICE RANSOMWARE PROTECTION

BlackFog's data exfiltration prevention technology stops ransomware! After your trial, meet with BlackFog's VP of Threat Intelligence who will analyze the findings and present you with your customized threat report.



#### NINJIO

#### EMPLOYEE CYBERSECURITY AWARENESS VIDEO TRAINING

4 minute "gamified" video episodes on real breaches that train your employees on how to avoid falling victim to hack attacks. Actively train up to 25 employees with this educational software.



#### CONTROL CASE

#### PRIVACY REGULATORY BODY COMPLIANCE AUDIT

Control Case provides a 30 minute consultation to identify if your business' sensitive information properly complies with foreign, federal, state, & private privacy regulatory laws.

# **Post Incident Service Providers**

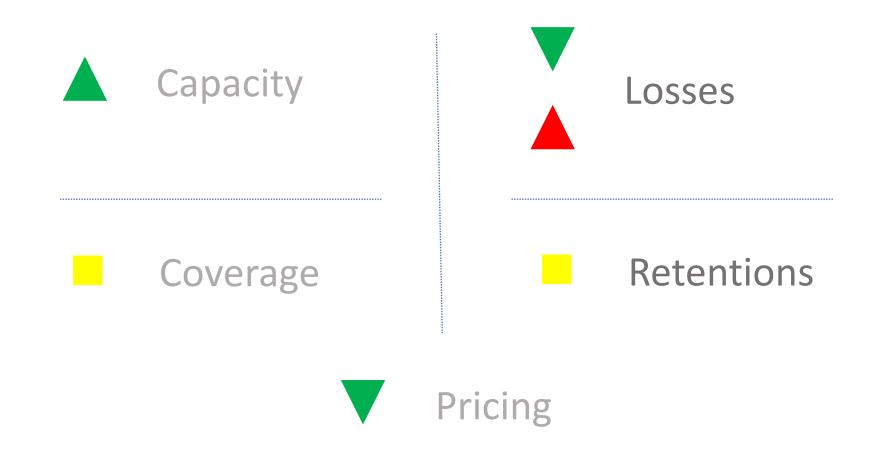
Company	Primary Service Capability
BakerHostetler	Response Coach
Borden Ladner Gervais	Response Coach (Canada)
Cipriani & Werner	Response Coach
Fasken Martineau	Response Coach (Canada)
Marshall Dennehey	Response Coach
Mullen Coughlin	Response Coach
Norton Rose Fulbright	Response Coach

	ı		CG
	KPMG	Computer Forensics (Canada)	Ch
	Kroll	Computer Forensics	Co
	LEVICK	Public Relations	Cro
	NPC	Notification	Cry
١			Cyi
	RSM	Computer Forensics	Da
	Stroz Friedberg	Computer Forensics	Ed
	The Ackerman Group	Extortion	Ep
	TransUnion	Notification	Eq
	Y	Communica Formanica	Exp
	Verizon	Computer Forensics	Fid
			_

	Allclear ID	Notification
	Ankura (acquired Navigant Cyber)	Computer Forensics
	CGI	Computer Forensics (Canada)
1	Charles River Associates	Computer Forensics
	Cooley LLP	Legal Counsel
	CrowdStrike	Computer Forensics
	Crypsis	Computer Forensics
	Cyintelligence	Computer Forensics
	Davis Wright Tremaine	Legal Counsel
	Edelman	Public Relations
	Epiq	Notification
	Equifax	Notification (Canada)
	Experian	Notification
	Fidelis Cybersecurity	Computer Forensics
	FireEye	Computer Forensics

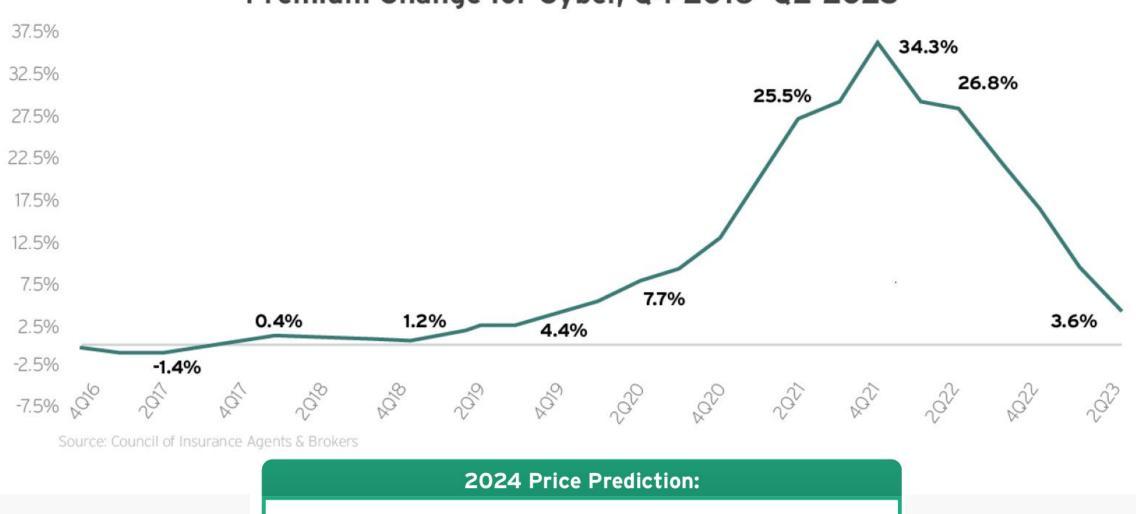


# 2024 Q1 Update State of the Cyber Insurance Market



# 2024 Cyber Insurance Premium Outlook

Premium Change for Cyber, Q4 2016-Q2 2023

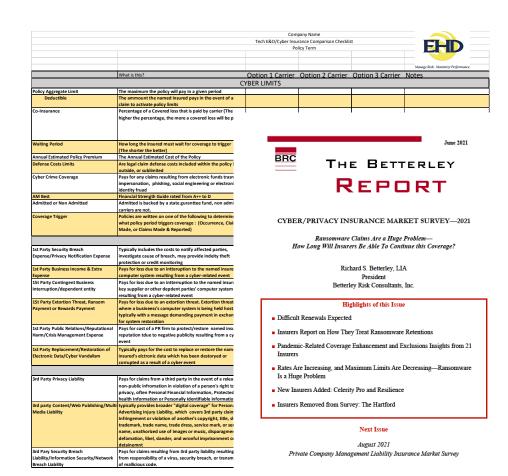


0% to +15%

# 2024 Cyber Insurance Coverage Updates

## **NOT ALL CYBER POLICIES CREATE EQUAL**

- 1. Cyber Crime (Phishing/Funds Transfer Fraud)
- 2. Ransomware/Extortion
- 3. Neglected Software
- 4. Bricking/Hardware Replacement/Betterment
- 5. Crypto-Jacking



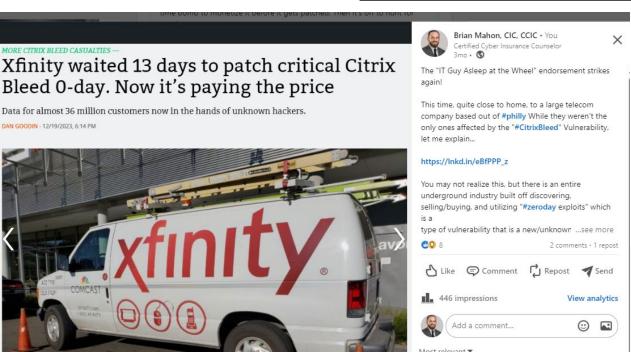


# **Neglected Software Endorsement**

It is agreed that the **Policy** is amended as follows:

1. Item 4 of the Declarations is amended by adding the following:

Period of Neglect	Coinsurance	Limit of Insurance per Policy Period
0 – 45 days	0%	\$ <limito1></limito1>
46 – 90 days	5%	\$ <limito2></limito2>
91 – 180 days	10%	\$ <limito3></limito3>
181 – 365 days	25%	\$ <limito4></limito4>
Longerthan 365 days	50%	\$ <limito5></limito5>





# How do Cyber Underwriters Rate my Cyber Insurance Policy?

- 1. Industry
- 2. Revenue
- 3. Type & Amount of Data
- 4. Loss History
- 5. IT Controls



#### 2023 Cyber Security Control Requirements for Cyber Insurance Underwriting

#### RED

Minimum standard of security required for underwriters

- · Multifactor authentication (MFA) for employee email
- · MFA for remote access
- · MFA for privileged accounts/privileged access
- · Offsite (preferably offline) backups of critical data.
- Deploy an endpoint detection and response (EDR) solution on all managed endpoints (Underwriter requirements for EDR solutions depends largely on the insured's revenue)
- · Create an audited written plan for patching critical software and hardware
- · Employee cybersecurity training, including phishing simulations

#### **AMBER**

Requirements over and above red—
more attractive
to underwriters

- · Strong email filtering tools
- · Privileged access account security measures
- End-of-life (EOL)/unsupported software and hardware segregated from the network, with plans to decommission in a timely fashion (This can be classified as "Red" for some underwriters)
- Cyber-incident disaster recovery/incident response plan, and segmentation of your computer network by operational function, data classification and operational risk
- · Local domain control turned off on all owned managed endpoints

#### **GREEN**

Requirements over and above amber— most attractive to underwriters

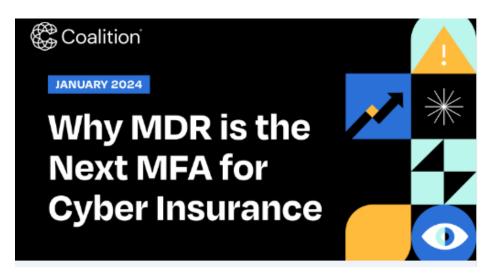
- · Password management
- Detailed asset footprint of particular service accounts with domain credentials, services and monitoring
- · Security information and event monitoring (SIEM) tool
- · Data loss prevention (DLP) tool
- · Follow an information security framework
- Maintain a 24/7 Security Operations Center (SOC) internally or externally

## **MDR**



Managed detection and response is an outsourced cyber protective service that combines advanced technology and human knowledge to actively seek, detect, monitor and respond to cyber threats.

At-Bay acknowledged the impact of MDR by saying an "MDR solution could help prevent or mitigate the losses of more than 50% of cyber insurance claims"



# More Scrutiny on Recommended IT Security Policies

## **External-Facing**

Website Privacy Policy

Website Terms of Use

## **Internal-Facing**

Data Security Policy

**Data Breach Response Policy** 

**Data Classification Policy** 

**Document Retention/Destruction Policy** 

Acceptable Use Policy

**BYOD Policy** 

Remote Access Policy

**Credit Card Handling Policy** 

Vendor Selection/Management Policy

Wire Transfer Policy

## **IT-Facing Policies**

Physical Security Policy

**Asset Management Policy** 

Change Management Policy

Password Policy

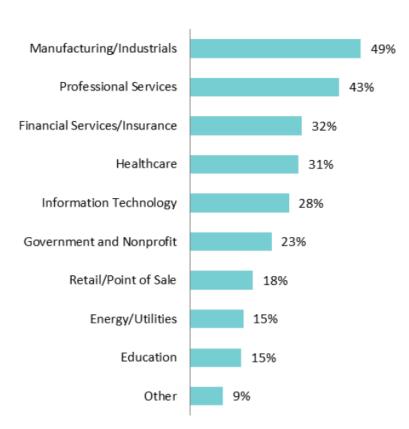
Backup Policy

Website ADA Accessibility Policy

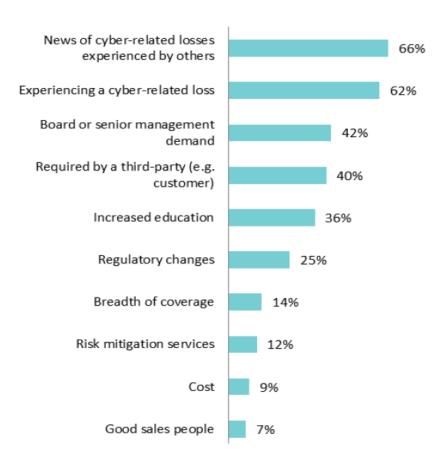


# **Cyber Insurance by Industry**

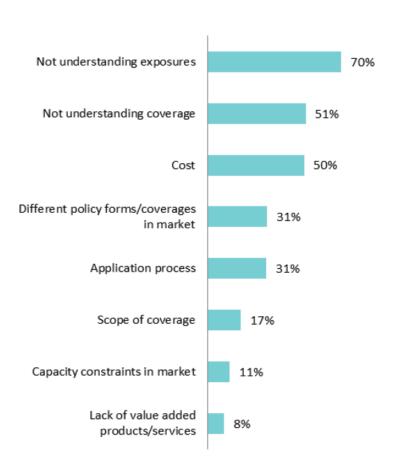
# What industries brought the most new-to-market buyers of standalone cyber insurance?



# What is the top driver(s) of new/increased cyber insurance sales?



# What are the biggest obstacles to writing/selling cyber insurance?



# TIPS, TRICKS, BEST PRACTICES, Q&A



# **Cyber Insurance Application Process**

- 1. How are you mitigating risks?
- 2. Be as thorough and descriptive as possible
- 3. Use an addendum if necessary to further explain any "no" answers
- 4. Explain and describe any updates that have been performed or are expected to be performed



<u>Travelers Wants Out of Contract With Insured That Allegedly Misrepresented MFA Use (insurancejournal.com)</u>



# **Tips for Cyber Insurance Buyers**

- 1. Work with insurance professionals that understand cybersecurity
- 2. Work with IT professionals that understand cyber insurance
- 3. Start early
- 4. Take advantage of pre-incident loss control services offered by current carriers
- 5. Put the 365/24/7-incident response hotline # from your policy in your cellphone
- 6. Invest in IT controls, like security/awareness training, pen tests, MDR, MFA etc. (See slide 30)
- 7. Invest in IT processes and procedures (see slide 32)



# **Incident Response Best Practices**

- 1. Do not be afraid to call insurance carrier
  - 1. (notice of circumstance versus a claim)
- 2. Get Panel Providers Pre-Approved
- 3. Do not destroy logs (crime scene)
- 4. Do Act Fast
- 5. Do Reference Incident Response Plan
- 6. Do Communicate frequently with DBRP Team



# How to Evaluate Your Cyber Insurance Agent

#### **Basics**

- 1. Licensed
- 2. Credentialed
- 3. Reviews & Complaints
- 4. AM Best

#### **Advanced**

- 1. Service timeline
- 2. Technology
- 3. Industry Specific Knowledge

#### **Questions to Ask**

- 1. How many cyber insurance policies do you write?
- 2. Have you been Involved in any cyber claims?
- 3. What proactive services will you offer to keep me out of trouble?

https://www.brianmmahon.com/post/is-my-insurance-broker-agent-good-how-to-evaluate-your-insurance-agent-broker-in-the-internet-age



# **Cyber Insurance Carrier Tiers**







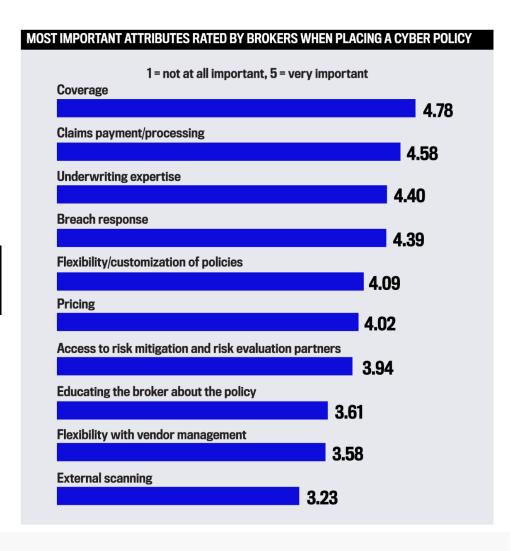








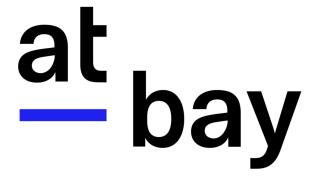






https://www.insurancebusinessmag.com/us/

# Cyber Insurance Carrier Tiers















# **Q&A – Thank You!**







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