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Fortifying Your Cyber Resiliency: Key Factors to Consider and Assess for Comprehensive Cyber Insurance Coverage

Elizabeth R. Dill, ***Partner & Co-Chair, Advisory Compliance***
Mullen Coughlin LLC

Lauren Winchester, ***SVP, Risk Advisory***
Corvus Insurance

Margaux Weinraub, ***Cyber Practice Leader***
Graham Company, Marsh McLennan Agency

Privacy+ Security Forum

Speakers

Elizabeth R. Dill

Mullen Coughlin LLC – *Partner & Co-Chair, Advisory Compliance*
P: (267) 930-5327 | **E:** edill@mullen.law

Lauren Winchester

Corvus Insurance – *SVP, Risk Advisory*
P: (215) 996-7415 | **E:** lwinchester@corvusinsurance.com

Margaux Weinraub

Graham Company, Marsh McLennan Agency – *Cyber Practice Leader*
P: (215) 701-5404 | **E:** margaux.weinraub@marshmma.com

The “Why” Behind Cyber Insurance Coverage

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How Does Cyber Insurance Improve Resiliency?

Cyber Incident Prevalence

2021

Industry Sector	Count
Ransomware	1,153
Business Email Compromise (BEC) – Total	1,059
BEC – Other	698
BEC – Wire Fraud	361
Vendor Breach	623
Network Intrusion	559
Other	367
Inadvertent Disclosure	209
Total	**3,970**

2022

Industry Sector	Count
Business Email Compromise (BEC) – Total	1,077
BEC – Other	733
BEC – Wire Fraud	344
Ransomware	732
Network Intrusion	382
Vendor Breach	316
Other	245
Inadvertent Disclosure	207
Total	**2,959**

2023

Industry Sector	Count
Business Email Compromise (BEC) – Total	1,343
BEC – Other	996
BEC – Wire Fraud	347
Ransomware	884
Vendor Breach	749
Other	403
Network Intrusion	323
Inadvertent Disclosure	218
Total	**3,920**

2024 (through Q3)

Industry Sector	Count
Business Email Compromise (BEC) – Total	1,200
BEC – Other	916
BEC – Wire Fraud	284
Ransomware	724
Vendor Breach	650
Other	281
Network Intrusion	242
Inadvertent Disclosure	171
Total	**3,268**

How Does Cyber Insurance Improve Resiliency?

Cyber Incidents Affect All Industries

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2021

Industry Sector	Count
Professional Services	1,024
Manufacturing and Distribution	704
Healthcare and Life Sciences	520
Financial Services	461
Technology	372
Education	215
Non-Profit	205
Government	200
Hospitality and Entertainment	152
Retail/e-Commerce	73
Energy	37
Other	7
Total	**3,970**

2022

Industry Sector	Count
Professional Services	773
Manufacturing and Distribution	448
Healthcare and Life Sciences	376
Financial Services	350
Technology	333
Non-Profit	157
Education	142
Hospitality and Entertainment	139
Government	122
Retail/e-Commerce	84
Energy	34
Other	1
Total	**2,959**

2023

Industry Sector	Count
Professional Services	928
Financial Services	588
Healthcare and Life Sciences	572
Manufacturing and Distribution	538
Technology	372
Education	245
Non-Profit	208
Hospitality and Entertainment	169
Government	138
Retail/e-Commerce	130
Energy	32
Other	0
Total	**3,920**

2024 (through Q3)

Industry Sector	Count
Professional Services	936
Healthcare and Life Sciences	534
Manufacturing and Distribution	403
Financial Services	381
Technology	271
Education	189
Non-Profit	156
Hospitality and Entertainment	150
Government	123
Retail/e-Commerce	85
Energy	40
Other	0
Total	**3,268**

Getting to Know your Insurance Resources

- Cyber insurance broker
- Cyber insurance carrier
  - Underwriters
  - Claims professionals
- Cyber incident response partners

Where's the Risk? And What to Look For…

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Internal Threats

Employees

- Phishing
- Unintended disclosure by email, fax, phone or in person
- Circumvent security restrictions
- Malicious or nosey employees

Failure to encrypt portable devices

Improper disposal of personal information (dumpsters)

Lack of education and awareness

External Threats

Cyber threat actors

Phishing and social engineering

Malware

Ransomware

Thieves (in person)

Vendors / Third Parties

State-sponsored / Advanced Persistent Threat (APT)

What Can Happen?

Ransomware Incidents

2021	
Number of RW Incidents	1,153
Number of RW Incidents Paid	314
Average Ransom Demand	$2,126,671
Average Ransom Payment	$500,951
Median Ransom Payment	$216,093
Ransom Payment Reason	Delete Only – 44 Key and Delete – 150 Key Only – 120

2022	
Number of RW Incidents	732
Number of RW Incidents Paid	97
Average Ransom Demand	$2,272,682
Average Ransom Payment	$400,791
Median Ransom Payment	$150,000
Ransom Payment Reason	Delete Only – 21 Key and Delete – 39 Key Only – 37

2023	
Number of RW Incidents	884
Number of RW Incidents Paid	138
Average Ransom Demand	$2,243,227
Average Ransom Payment	$937,751
Median Ransom Payment	$200,000
Ransom Payment Reason	Delete Only – 42 Key and Delete – 56 Key Only – 40

2024 (through Q3)	
Number of RW Incidents	724
Number of RW Incidents Paid	102
Average Ransom Demand	$1,722,135
Average Ransom Payment	$413,591
Median Ransom Payment	$259,065
Ransom Payment Reason	Delete Only – 41 Key and Delete – 38 Key Only – 23

What Can Happen?

Business Email Compromise Incidents

2021	
Number of BEC Incidents	1,059
Number of BEC – WF Incidents	361
Average Amount Fraudulently Wired	$343,303
Median Amount Fraudulently Wired	$131,440

2022	
Number of BEC Incidents	1,077
Number of BEC – WF Incidents	344
Average Amount Fraudulently Wired	$376,234
Median Amount Fraudulently Wired	$145,000

2023	
Number of BEC Incidents	1,343
Number of BEC – WF Incidents	347
Average Amount Fraudulently Wired	$824,704
Median Amount Fraudulently Wired	$148,867

2024 (through Q3)	
Number of BEC Incidents	1,200
Number of BEC – WF Incidents	284
Average Amount Fraudulently Wired	$451,703
Median Amount Fraudulently Wired	$175,000

What Can Happen?

Network Intrusion Incidents

2021

Industry Sector	Count
Professional Services	121
Manufacturing and Distribution	87
Healthcare and Life Sciences	74
Technology	72
Financial Services	67
Education	34
Non-Profit	34
Hospitality and Entertainment	31
Government	21
Retail/e-Commerce	14
Energy	3
Total	**559**

2022

Industry Sector	Count
Professional Services	91
Manufacturing and Distribution	54
Healthcare and Life Sciences	51
Technology	43
Financial Services	37
Non-Profit	26
Education	24
Hospitality and Entertainment	21
Retail/e-Commerce	17
Government	16
Energy	2
Total	**382**

2023

Industry Sector	Count
Professional Services	96
Healthcare and Life Sciences	49
Financial Services	44
Manufacturing and Distribution	32
Technology	32
Hospitality and Entertainment	19
Government	15
Education	14
Non-Profit	12
Retail/e-Commerce	9
Energy	1
Total	**323**

2024 (through Q3)

Industry Sector	Count
Professional Services	65
Healthcare and Life Sciences	37
Manufacturing and Distribution	25
Financial Services	22
Technology	21
Education	18
Non-Profit	17
Retail/e-Commerce	14
Hospitality and Entertainment	11
Government	8
Energy	4
Total	**242**

What Can Happen?

Inadvertent Disclosure Incidents

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2021

Industry Sector	Count
Healthcare and Life Sciences	61
Financial Services	37
Education	28
Professional Services	21
Government	20
Technology	14
Manufacturing and Distribution	9
Non-Profit	9
Hospitality and Entertainment	7
Retail/e-Commerce	2
Energy	0
Total	**209**

2022

Industry Sector	Count
Healthcare and Life Sciences	52
Professional Services	39
Financial Services	25
Technology	24
Government	18
Education	16
Non-Profit	12
Manufacturing and Distribution	11
Hospitality and Entertainment	8
Energy	2
Retail/e-Commerce	0
Total	**207**

2023

Industry Sector	Count
Healthcare and Life Sciences	54
Financial Services	41
Professional Services	35
Technology	24
Education	16
Non-Profit	15
Manufacturing and Distribution	14
Government	13
Energy	2
Hospitality and Entertainment	2
Retail/e-Commerce	2
Total	**218**

2024 (through Q3)

Industry Sector	Count
Healthcare and Life Sciences	46
Financial Services	38
Professional Services	24
Education	20
Non-Profit	14
Government	10
Technology	9
Manufacturing and Distribution	4
Retail/e-Commerce	3
Hospitality and Entertainment	2
Energy	1
Total	**171**

What Can Happen?

Privacy Litigation & Regulatory Investigation

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2021

Industry Sector	Count
Healthcare and Life Sciences	33
Professional Services	9
Financial Services	7
Technology	5
Hospitality and Entertainment	4
Retail/e-Commerce	3
Manufacturing and Distribution	2
Non-Profit	1
Education	0
Energy	0
Government	0
Total	**64**

2022

Industry Sector	Count
Healthcare and Life Sciences	72
Professional Services	46
Financial Services	31
Manufacturing and Distribution	10
Technology	4
Retail/e-Commerce	3
Energy	2
Hospitality and Entertainment	2
Non-Profit	1
Education	0
Government	0
Total	**171**

2023

Industry Sector	Count
Technology	94
Healthcare and Life Sciences	67
Financial Services	37
Professional Services	30
Manufacturing and Distribution	12
Non-Profit	10
Hospitality and Entertainment	7
Retail/e-Commerce	6
Education	5
Government	2
Energy	0
Total	**270**

2024 (through Q3)

Industry Sector	Count
Healthcare and Life Sciences	113
Technology	68
Professional Services	69
Manufacturing and Distribution	32
Financial Services	29
Hospitality and Entertainment	27
Retail/e-Commerce	26
Education	7
Government	2
Energy	1
Non-Profit	1
Total	**366**

Key Coverages – 1st Party

1. Crisis Management/Event Response

- ➢Breach Coach – initial evaluation of event
- ➢Forensic investigation
- ➢Crisis communications
- ➢Notification costs based on state law
- ➢Identity/credit monitoring services

2. Data Restoration

- ➢Cost to restore/recreate/recollect damaged or lost data

3. Business Interruption

- ➢Lost income and extra expenses
- ➢Contingent business interruption
  - ➢Interruption of service of an organization that you rely on

4. Cyber Extortion

- ➢Securing digital currency
- ➢OFAC List review
- ➢Negotiating with bad actor

Key Coverages – 3rd Party

1. Privacy Liability

- ➢Failure to protect confidential information
- ➢Violation of privacy laws
- ➢Failure to comply with PCI-DSS standards

2. Network Security Failure

- ➢Failure to protect network

3. Claims brought by:

- ➢Affected individuals
- ➢Class action suits
- ➢Customers
- ➢Governmental/regulatory agencies
- ➢State Attorney Generals

Smart Cyber Insurance® and Excess

Comprehensive and flexible coverage:

Third-Party Coverages

- Network Security & Privacy Liability
- Regulatory Investigations, Fines & Penalties
- Media Liability
- PCI-DSS
- Assessment Expenses
- Breach Management Expenses

First-Party Coverages

- Business Interruption
- Contingent Business Interruption
- Digital Asset Destruction, Data Retrieval, & System Restoration
- System Failure
- Cyber Extortion & Ransomware
- Social Engineering & Cyber Crime
- Breach Response & Remediation Expenses
- Reputation Loss

Additional Coverages

- Bricking Coverage
- Invoice Manipulation
- Forensic Accounting Coverage
- Bodily Injury
- Criminal Reward Coverage
- Preventative Shutdown
- Dependent System Failure
- Industry-Specific Endorsements

Eligibility for such programs is determined when coverage is applied for. Policy quotes, terms and conditions, and premiums are made in accordance with Corvus Insurance's underwriting guidelines. The policy, not general descriptions or material within this presentation will form the contract between the insured and our insurance carrier partners. Coverage may not be available in all jurisdictions.

Cyber Insurance Application Process – What to Know

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The Application Process – Practical Background

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- Application information collected:
  - General
  - Financial details
  - Security controls
  - Record retention
  - Privacy controls
  - Vendor risk management
  - Supplemental materials
- Evolving claims activity and market conditions drives information collection

What Controls are Carriers Looking for?

Most Commonly-Required Controls

- MFA for remote, email, admin. (and depending on size, MFA for backups)
  - **Email Access**: On-premise email servers or cloud hosted email servers
  - **Remote Access**: Anything that allows access into your internal environment or access to SaaS based applications that store PII, PHI or any other critical information.
  - **Administrator Access**: Accounts that give full access to a system like local administrator accounts and domain administrator accounts (privileged user account access).
- Email filtering
  - Software used to monitor inbound and outbound emails to protect businesses from spam, phishing or malicious emails containing viruses and malware
- Endpoint Detection & Response (EDR)
  - An integrated endpoint security solution that combines real-time continuous monitoring and collection of endpoint data with rules-based automated response and analysis capabilities
- Segregated backups (offline or air-gapped)
  - Most commonly this includes two mediums: First is **tape backups** where data is written to a cassette tape and then stored offline; Second is **cloud backups** where data is sent to the cloud
  - Air-gapped: helps ensure that a backup copy can't be deleted (whether accidentally or on purpose) or encrypted during a ransomware event
- Redundant backup copies stored in **two or more** locations, with **one (1) offline**.
  - Multiple copies of the data with different backup types in different locations
- Number of unique records
  - Knowing the amount of PII and PHI gives you a better understanding on how much exposure there is, and if there is a loss, how these coverages, notification costs, credit monitoring services, class action and fines will be impacted

What Controls are Carriers Looking for?

Additional Controls / Questions

- Do you have any end of life or end of support software on your network?
  - If **yes**, is it segregated from the rest of the network and not internet facing?
- Do you allow third parties to access your systems remotely? Explain controls.
- Details surrounding encryption practices
- BC/DR/IR plans in place
- Prior to executing an electronic payment, do you require out-of-band authentication?

Application Questions

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- Understanding the “why” to mitigate future issues
- Industry-specific
  - Healthcare, Manufacturing, Critical Infrastructure, Professional Services, Financial Services, etc.
- Prior incident lessons learned

The Application Process – How to Get it Right

- Be inclusive of **all** organizations to be insured by the policy
- Assemble an internal team of subject-matter experts
- Utilize your external insurance resources
- Ask questions
- Add comments

Preparing for Placement Or Renewal – An Overview

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Key Infrastructure Components & Timing

- Cross-disciplinary risk management team
- Assessment of current controls, policies and plans
- Discussion with external resources
- Make needed updates
  - Changes in operations?
  - Changes in law?
- When should you start preparing?

Insurance Market Forecast

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The Year of the Vendor Breach

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2021

Industry Sector	Count
Professional Services	124
Healthcare and Life Sciences	113
Financial Services	106
Manufacturing and Distribution	93
Government	60
Technology	36
Education	30
Non-Profit	30
Hospitality and Entertainment	17
Energy	7
Retail/e-Commerce	7
Total	**623**

2022

Industry Sector	Count
Financial Services	66
Healthcare and Life Sciences	58
Professional Services	52
Manufacturing and Distribution	33
Technology	28
Non-Profit	21
Government	15
Education	14
Hospitality and Entertainment	12
Retail/e-Commerce	10
Energy	7
Total	**316**

2023

Industry Sector	Count
Financial Services	196
Healthcare and Life Sciences	144
Education	87
Professional Services	86
Non-Profit	50
Technology	48
Manufacturing and Distribution	46
Government	29
Hospitality and Entertainment	29
Retail/e-Commerce	24
Energy	10
Total	**749**

2024 (through Q3)

Industry Sector	Count
Healthcare and Life Sciences	196
Professional Services	163
Financial Services	96
Technology	58
Education	33
Government	24
Hospitality and Entertainment	23
Manufacturing and Distribution	20
Non-Profit	16
Energy	12
Retail/e-Commerce	9
Total	**650**

Forecast for 2025

- Market conditions
- Changes in underwriting priorities?
- Additional risks to consider as the threat/litigation/regulatory landscape changes?

Speakers

Elizabeth R. Dill

Mullen Coughlin LLC – *Partner & Co-Chair, Advisory Compliance*
P: (267) 930-5327 | **E:** edill@mullen.law

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