Building a Culture of Cybersecurity: Minimum Baseline of Cybersecurity for Municipalities

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Massachusetts Municipal Councillors' Association

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Municipal Cybersecurity Threats

*What are they, and
how are they changing?*

MassCyberCenter
at MassTech

Threats

Security Boulevard

U.S. Healthcare Data Breach Cost $4 Billion in 2019. 2020 Won't Be Any Better

Ransomware will continue to be a plague on healthcare: While ransomware attackers will target any business they believe that they can infect ...

Worcester Telegram

Local communities fight back on cyberattacks

Local communities fight back on cyberattacks ... the police department in this northwestern Worcester County town of about 12,000 is still not ...

Sep 21, 2019

TechRepublic

FBI, Secret Service investigating cyberattack on Florida water treatment plant

Federal law enforcement is now looking into a cyberattack at a water treatment plant in Oldsmar, FL where someone was able to remotely ...

4 weeks ago

Ransomware ravages municipalities nationwide this week

Doug Olenick   Online Editor

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NEWS ANALYSIS
Why local governments are a hot target for cyberattacks

Recent ransomware and other attacks underscore the value attackers see in the data stored in city and regional government systems. Here's why they are vulnerable and what they can do to reduce the threat.

By Cynthia Brumfield

BetaBoston

Hacking attacks plague Massachusetts schools

Hacking attacks plague Massachusetts schools ... disrupted in multiple districts, forcing schools to pay thousands of dollars in cyber-protection.

4 weeks ago

Cyberattack hits Augusta municipal operations; City Center closed

Officials say a nasty, intentionally deployed virus shut down public safety computers and made the city's entire network unusable, but the phone system and public safety radio system were not affected.

BY **KEITH EDWARDS** KENNEBEC JOURNAL

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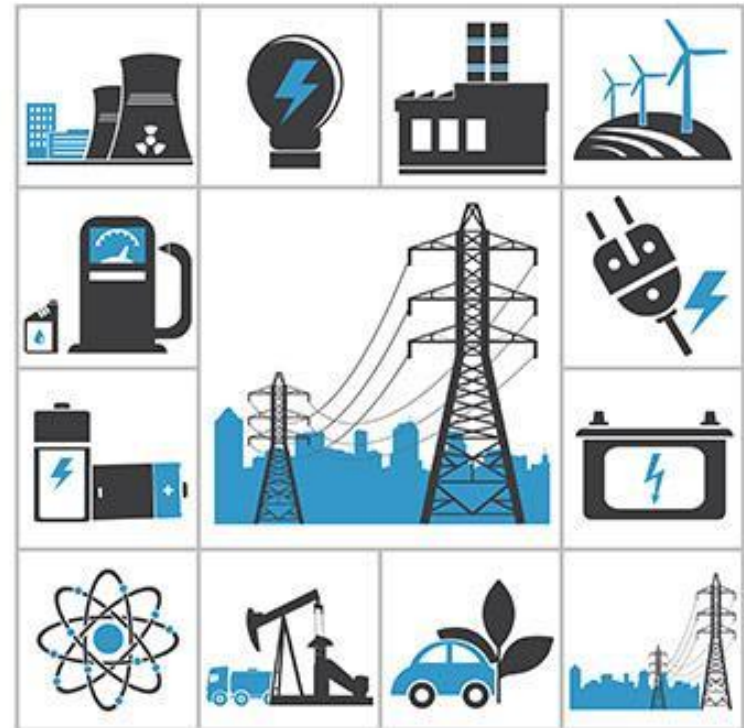
3

Ransomware Kill Chain
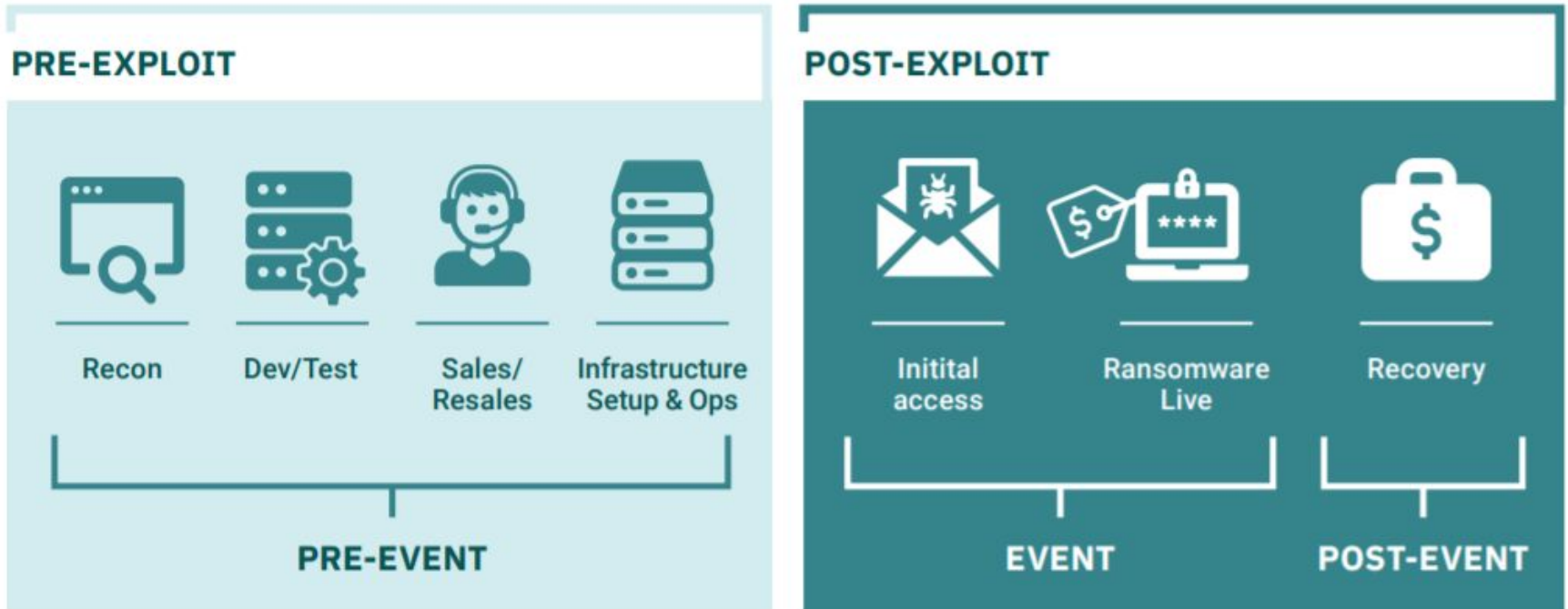
Source: World Economic Forum's Partnership against Cybercrime in collaboration with Accenture

Threat Targets: Information and Safety

Federal Trade Commission
https://www.ftc.gov/tips-advice/business-center/privacy-and-security/data-security

National Institute of Standards and Technology

https://www.nist.gov/news-events/news/2015/12/nist-seeks-comments-cybersecurity-framework-use-potential-updates-and

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What is Cybersecurity?

- Leadership Talent/employment
  - Training/education
    - Citizens

- Cyber standards and procedures
- Incident response plans/ recovery
- Engagement

People

Process

Technology
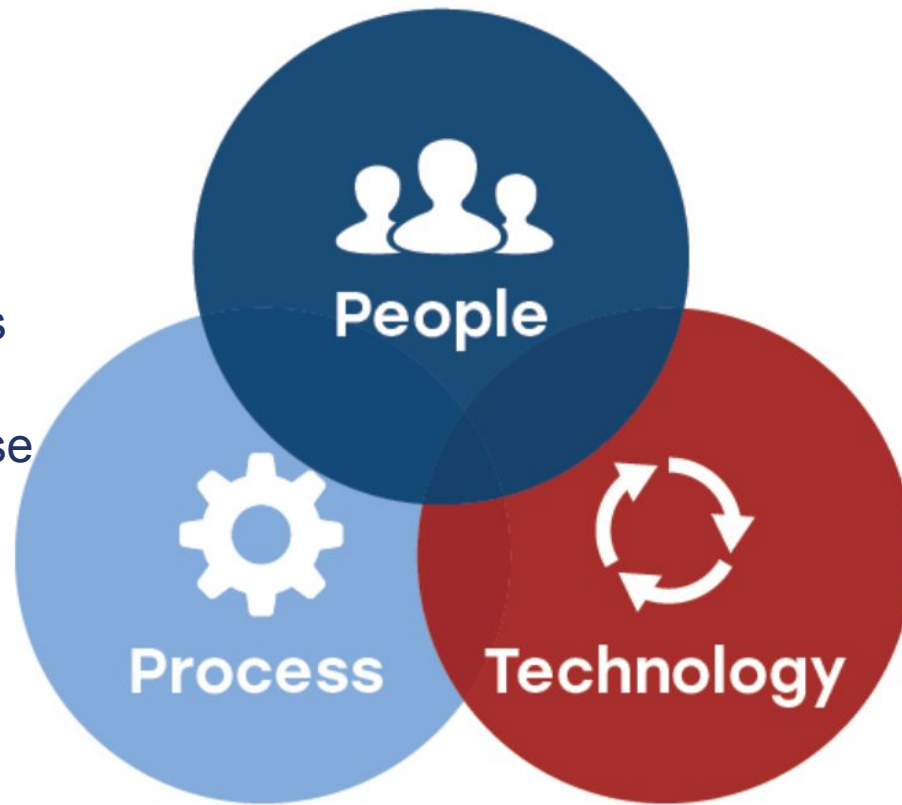
- Sensors
- Decision aids
  - Defense tools

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Minimum Baseline of Cybersecurity for Municipalities

The Minimum Baseline of Cybersecurity for Municipalities is a framework for helping Massachusetts municipalities improve their cybersecurity posture and protect their municipality from cyberattacks using people, process, and technology.

There are 4 goals:

Trained and Cyber-Secure Employees

Improved Threat Sharing

Cyber Incident Response Planning

Secure Technology Environment and Best Practices

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Minimum Baseline Learning Modules

A fun way to introduce the framework and goals.

Using a notional cyberattack occurring in the fictional town of Massboro as an example to explain the Minimum Baseline of Cybersecurity, the first module introduces the Minimum Baseline, and the other four modules explain each of the four goals.

Go to MassCyberCenter.org and look under Resiliency to experience the learning modules and learn more.

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SAVE-THE-DATE

Massachusetts Municipal
Cybersecurity Summit
6 October 2022

We hope to see you there!

For last year's Summit, check out the recordings at
http://masscybercenter.org/events/massachusetts-munici
pal-cybersecurity-summit

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Mass**Cyber**Center Team!

Visit our website to connect with us and learn more:

MassCyber**Center.org**

ADDITIONAL INFORMATION

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Minimum Baseline of Cybersecurity Goals

Trained and Cyber-secure Employees

Benefits
- Reduce risk of cybersecurity incidents by improving the training and awareness of system users.

How
- Annual individual employee cybersecurity awareness training.
- Make it easy and put incentives in place to get it done.

Improved Threat Sharing

Benefits
- Respond faster to threats and improve regional awareness and resilience by sharing cyber threat information.

How
- Sign up for threat sharing alerts through MS-ISAC or CISA; get to know neighboring towns; join a regional IT group.

Cyber Incident Response Planning

Benefits
- Strengthen defenses and minimize cyber incident impacts by creating an effective strategy for handling cyber incidents.

How
- Use tools and resources to create a cyber incident response plan to protect against and respond to cyberattacks. Go to MassCyberCenter.org for more information.

Secure Technology Environment and Best Practices

Benefits
- Reduce the threat of cybersecurity incidents and minimize incident impacts by implementing best practices to make your technology environment more secure.

How
- Some basic best practices for getting started include backing up critical data and systems, requiring strong passwords, and updating and patching systems regularly..

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Minimum Baseline of Cybersecurity Goal 1

Trained and Cyber-secure Employees

Benefits:

- Reduce the risk of cybersecurity incidents by improving the training and awareness of system users.

How to Achieve:

- Implement annual individual employee cybersecurity awareness training.

- Make it easy to do the training.

- Put incentives in place to get it done.

Guidance and a list of resources to get started…

MassCyberCenter
at MassTech
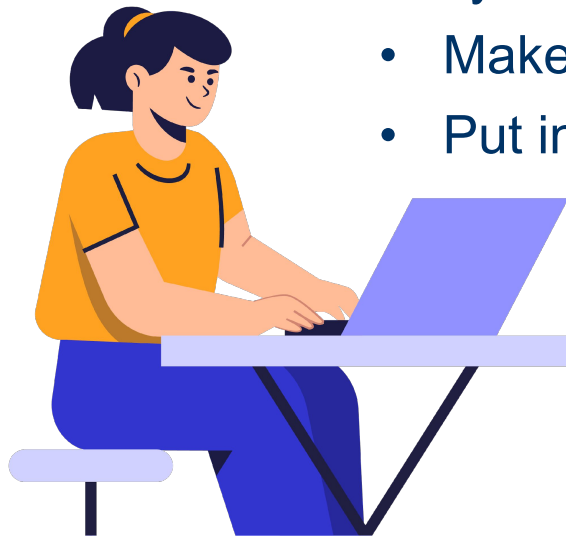
Minimum Baseline of Cybersecurity Goal 2

Benefits:

- Respond faster to threats and improve regional awareness and resilience by sharing cyber threat information.

How to Achieve:

- Sign up for threat-sharing alerts from MS-ISAC (it's FREE).

- Get to know your neighboring cities and towns.

- Join a regional IT group through the EOTSS Office of Municipal and School Technology.

Guidance and a list of resources to get started…

Improved Threat Sharing

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Minimum Baseline of Cybersecurity Goal 3

Cyber Incident Response Planning

Benefits:

- Strengthen municipal defenses and minimize cyber incident impacts by creating an effective strategy for handling cyber incidents.

How to Achieve:

- Use the tools and resources at MassCyberCenter.org to create a cyber incident response plan to protect against and respond to a cyberattack.

Guidance and a list of resources to get started…

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Minimum Baseline of Cybersecurity Goal 4

Benefits:

- Reduce the threat of cybersecurity incidents and minimize incident impacts by implementing some basic best practices to make your technology environment more secure.

How to Achieve:

- There are many best practices listed in the resources. Here are a few to get started:
  - Require strong passwords
  - Backup critical data and systems
  - Update and patch systems regularly
  - Do annual vulnerability assessments

Guidance and a list of resources to get started…

Secure Technology Environment and Best Practices

BEST PRACTICES

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