



CHAPPAQUA
Central School District

#WeAreChappaqua

Cybersecurity and Cybersafety

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Overview

Technology Department Vision

The Chappaqua Central School District will create an innovative, agile atmosphere of learning, that leverages advanced instructional technologies to support active learning environments. We will continually improve **our secure and private** infrastructure to support and advance District instructional visions and goals.



Essential Question

“How do we make cybersecurity and cybersafety part of District culture keeping students, faculty, and staff safe, while harnessing the power of the digital world?”



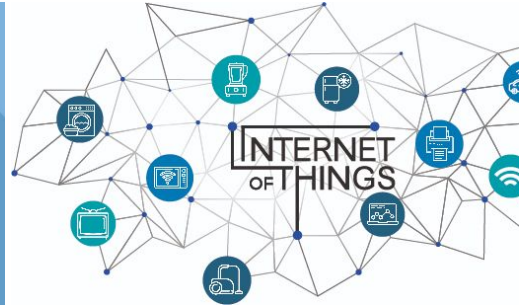
Thought Partners - Sources





Top Cyber Threats for Schools

1. **Phishing**
2. **Distributed Denial of Service Attacks**
3. **Data Breach**
4. **Ransomware**
5. **“Internet of Things” Vulnerabilities**





Landscape of Cyber Threats

Hackers' Latest Target: School Districts

Schools handle a lot of personal data and may not have strong technology teams, leaving them vulnerable to attacks, experts say.

CNY SCHOOLS & COLLEGES

ransomware attack: School district expects to pay \$50,000, insurance pays rest

Updated Jul 26, 2019; Posted Jul 26, 2019



NEWS WEATHER SPORTS VIDEO BEST OF MORE

Cyber Attack On Delays First Day Of School

School District's Computers

PUBLIC SAFETY

Cyber Attacks Rising as Two Local Schools are Victims

BY SPECTRUM NEWS STAFF |

PUBLISHED 1:46 PM ET JUL. 30, 2019 | UPDATED 5:27 PM ET JUL. 31, 2019



Current Security Measures

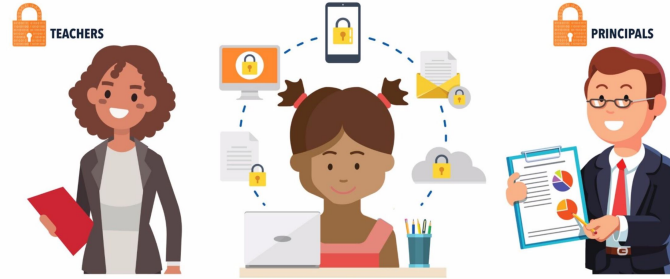
- **Firewalls**
- **Cloud Computing**
- **Backups**
- **Masked Data**
- **Network Monitoring**
- **Independent Testing and Validation**
- **Review of 3rd Party Contracts**
- **Staff Cybersecurity Training**



New York State Education Law 2-d



Education Law 2-d



NYSED

DISTRICTS

BOCES

**THIRD PARTY
CONTRACTORS**





Education Law 2-d Requirements



DATA PROTECTION



**PROTECTION
OF PII**



**NIST CYBERSECURITY
FRAMEWORK**



**COMPLAINT
PROCEDURES**



**PARENTS BILL OF
RIGHTS**



**THIRD-PARTY
CONTRACTS**



**INCIDENT
REPORTING AND
NOTIFICATION**



TRANSPARENCY



**DATA SECURITY AND
PRIVACY POLICY**



**ANNUAL EMPLOYEE
TRAINING**



**DATA PROTECTION
OFFICER**



Education Law 2-d Timeline

Current Proposals



**INITIAL DRAFT REGULATIONS
PRESENTED TO BOARD OF
REGENTS**

JAN 2019



**PUBLIC SUBMITS FEEDBACK
AND REGULATIONS REFINED**

JAN 2019 - DEC 2019



**BOARD OF REGENTS CONSIDERS
ADOPTION**

JAN 2020



**EDUCATIONAL AGENCIES ADOPT
DATA SECURITY AND PRIVACY
POLICY**

JULY 1, 2020

Data Security and Privacy Policy



NIST CSF ALIGNED PRACTICES

NIST Cybersecurity Framework aligned practices



DATA GOVERNANCE

ensure every use of PII benefits students and the educational agency



DISCLOSURE AVOIDANCE

protection of PII in public reports



STATE AND FEDERAL LAWS

FERPA, IDEA, and other laws



DATA PROTECTION OFFICER

employee responsible for the implementation of the policies



ANNUAL EMPLOYEE TRAINING

privacy and security awareness training



COMPLAINT PROCEDURES

complaints about breaches or unauthorized releases of student data




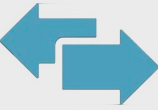


INCIDENT REPORTING AND NOTIFICATION

report the breach to the NYSED CPO and impacted stakeholders

Protection of Personal Identifiable Information

 STUDENT NAME	 PARENTS' NAMES	 STUDENT ADDRESS	 STUDENT NUMBER	 LINKABLE INFORMATION
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 DISCLOSURE AVOIDANCE PRACTICES	SUPPRESSION  Involves removing data to prevent identification of small groups
	BLURRING  Involves reducing the precision of the disclosed data to minimize identification
	PERTURBATION  Involves making small changes to the data to prevent identification of unique groups

Parent Bill of Rights



**DATA WILL NOT BE SOLD
AND WILL NOT BE RELEASED
FOR COMMERCIAL PURPOSES**



**INSPECTING RECORD
RIGHT TO REVIEW CHILD'S
EDUCATION RECORD**



**DATA IS PROTECTED
BY LAW AND SAFEGUARDS
MUST BE IN PLACE**



**NYSED COLLECTED DATA
LINK TO DEPARTMENT LISTING
OF COLLECTED DATA ELEMENTS**



**BREACH COMPLAINT
CONTACT PERSON FOR
PARENTS**



NIST Cybersecurity Framework

NIST FRAMEWORK CORE



PROFILES AND EDUCATIONAL AGENCY ACTION PLANS

TARGET PROFILE



STATE NYS K-12 TARGET PROFILE DEVELOPED

common desired cybersecurity outcomes are prioritized in the NYS K-12 Target Profile

CURRENT PROFILE



AGENCIES DETERMINE THEIR CURRENT PROFILE

educational agencies identify the current state of their cybersecurity activities in the Current Profile

GAP ANALYSIS



AGENCIES ANALYZE AND PRIORITIZE GAPS

agencies identify gaps by comparing the profiles and then prioritize the mitigation of those gaps

ACTION PLAN



AGENCIES DEVELOP AND IMPLEMENT ACTION PLANS

educational agencies develop plans to address gaps and adjusts practices in order to achieve the Target Profile



Third Party Contracts

 <p>DATA CONFIDENTIALITY MAINTENANCE</p>	 <p>IN ACCORDANCE WITH LAW</p>	 <p>IN ACCORDANCE WITH THE AGENCY POLICY</p>	 <p>DATA SECURITY AND PRIVACY PLAN</p>				 <p>IMPLEMENTATION OF ALL REQUIREMENTS</p>	 <p>SIGNED COPY OF THE PARENTS BILL OF RIGHTS</p>	 <p>THIRD-PARTY CONTRACTOR TRAINING</p>	 <p>SUBCONTRACTORS TRAINING</p>
 <p>SUPPLEMENTAL INFORMATION</p>	 <p>EXCLUSIVE PURPOSES FOR DATA USE</p>	 <p>OVERSIGHT OF SUBCONTRACTORS</p>	 <p>CONTRACT DURATION AND DATA DISPOSAL</p>	 <p>DATA ACCURACY / CORRECTION PRACTICES</p>	 <p>SECURITY PROTECTIONS AND DATA LOCATION</p>	 <p>ENCRYPTION PRACTICES APPLIED</p>				
 <p>ADDITIONAL STATUTORY AND REGULATORY OBLIGATIONS</p>	 <p>NOTIFY AGENCY OF ANY UNAUTHORIZED RELEASE</p>	 <p>LIMIT ACCESS TO PII</p>	 <p>NIST CSF SAFEGUARDS</p>	 <p>COMPLY WITH ALL REQUIREMENTS</p>	 <p>ONLY USE PII AS AUTHORIZED</p>	 <p>NOT DISCLOSE PII TO ANY OTHER PARTY</p>				
	 <p>SAFEGUARD THE PII IN CUSTODY</p>	 <p>ENCRYPTION PRACTICES APPLIED</p>	 <p>PROHIBITIONS ON COMMERCIAL USE</p>	 <p>OVERSIGHT OF SUBCONTRACTOR</p>						

Annual Employee Training



LAWS, POLICIES, AND PROCEDURES

- Data Security and Privacy Policy
- Incident Reporting
- Laws and Regulations
- Click Wrap Agreements



SECURITY AWARENESS

- Common Threats
- Phishing Recognition
- Social Engineering

KnowBe4
Human error. Conquered.



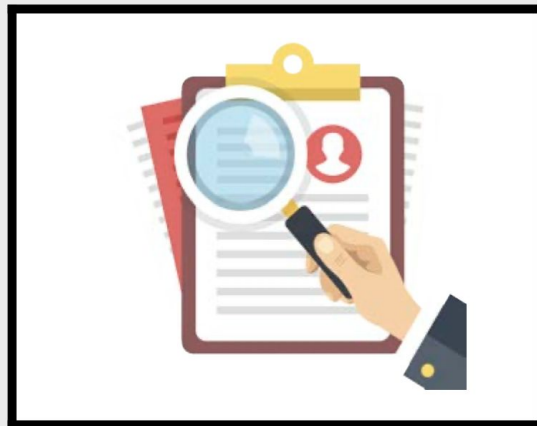
GCN TRAINING
GLOBAL COMPLIANCE NETWORK
YOUR SITE FOR INTERNET-BASED TRAINING

Complaint Procedures

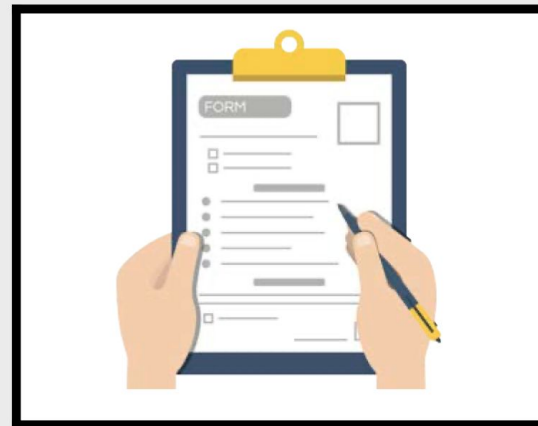
COMPLAINTS SUBMISSION PROCEDURE



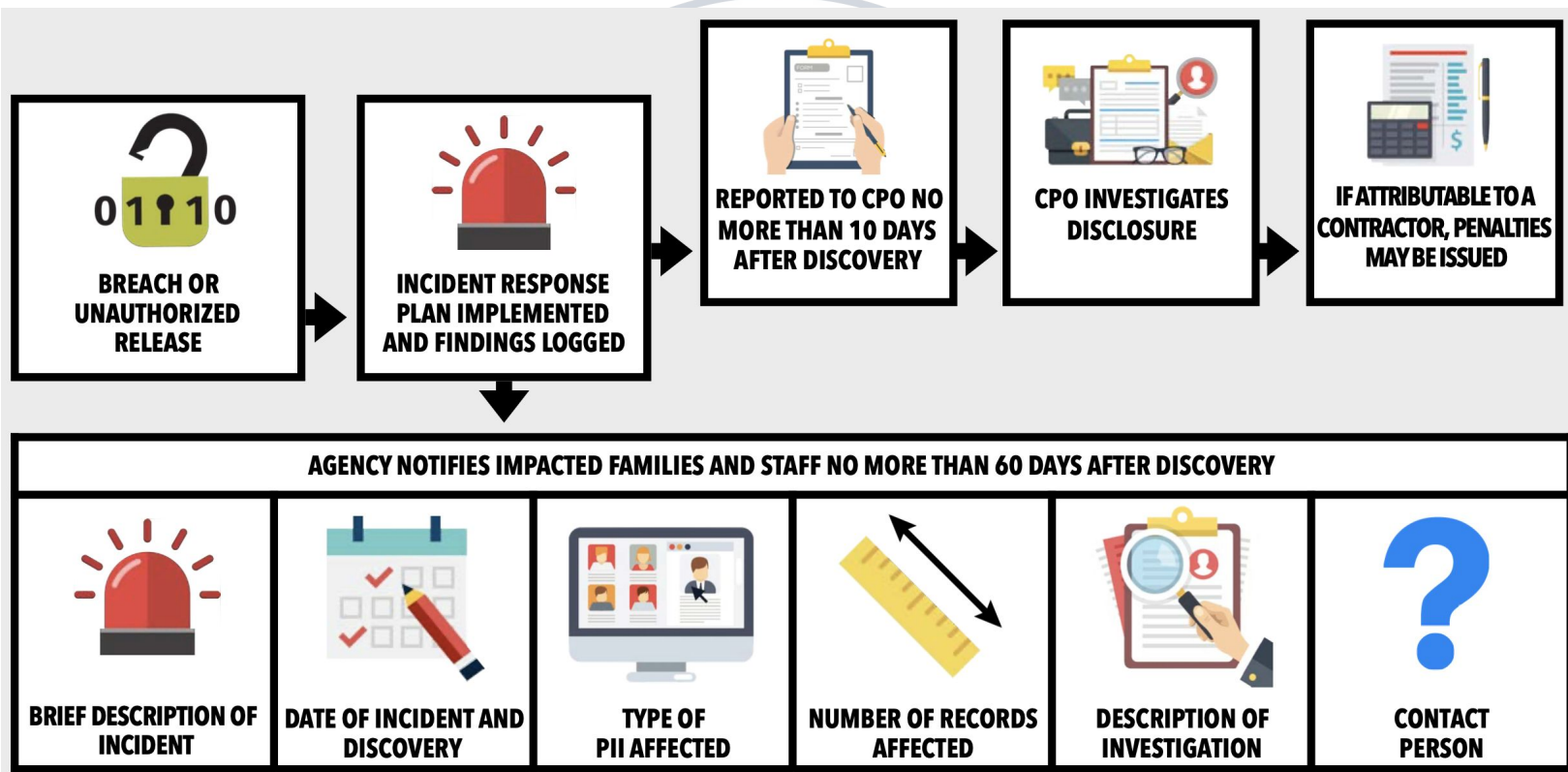
DISTRICT INVESTIGATION AND NOTIFICATION PROCEDURE



DISTRICT MAINTENANCE OF RELATED RECORDS



Incident Reporting & Notification



Data Protection Officer & Team

Categories

**Review
Guidance
Documents**

**Analyze
Staffing**

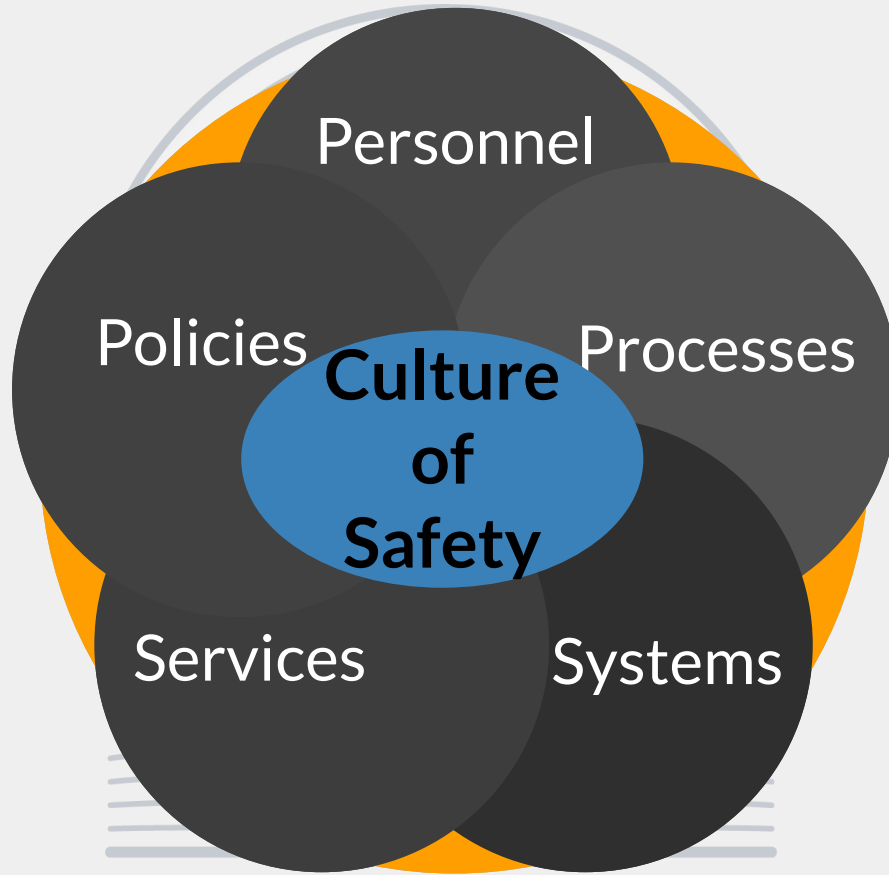
**Review
RIC &
Contractor
Services**

**Determine
Staffing
Approach**

**Board
Action**



Planning and Implementation



Essential Question

“How do we make cybersecurity and cybersafety part of District culture keeping students, faculty, and staff safe, while harnessing the power of the digital world?”

