

SENSITIVE DATA EXPOSURE INCIDENT CHECKLIST

INCIDENT # _____

Date became aware: _____ Date reported to ISO: _____

Date affected individuals notified: _______(should be within one week of incident discovery)

Type and scope of data exposed:

Incident Team:

STEP 1: IDENTIFICATION

Verify that an incident has actually occurred. This activity typically involves the end user, but may also result from proactive incident detection work of Technology Advancement and Support. If it is determined that an incident has occurred, inform the Chief Information Security Officer, and the Support Center.

Done	Task	Owner	Notes
	1.1 Immediately contain and limit exposure:	End user or	
	- If electronic device has been compromised:	technician	
	 Disable network connection (NOT power cable) from the compromised device 		
	 Do <u>not</u> access (do not logon) or alter compromised device 		
	 Do <u>not</u> power off the compromised device 		
	- Write down how the incident was detected and what actions have been taken so far. Provide as		
	much specificity as possible, including dates, times, and impacted machines, applications, websites,		
	etc.		
	Resources:		
	a) IT Incident Response Overview		
	b) Northland' Incident and Risk Assessment Policy		



c) EDUCAUSE Information Security Incident Management <u>https://spaces.internet2.edu/display/2014infosecurityguide/Information+Security+Incident+M</u> <u>anagement</u>		
1.2 Technology Advancement and Support immediately:	TAS / ISG	
 a) Calls the Support Center at (928) 524-7447. b) Notifies the Information Security Group (ISG) (928) at 532-6769 or email infosec@NPC.edu c) Reports incident according to the NPC Incident Response Overview. 		
Resources: a) TAS Incident Response Overview b) Information Security Incident Response Form (long or short)		
1.3 If the incident involves electronic devices or media stolen or lost within the local community, also alert law enforcement.	ISG	
a) Notify Campus Security		
1.4 Conduct preliminary assessment of type and scope of data exposed. If the incident potentially exposed sensitive data, notify all appropriate institution officials and keep them informed as incident investigation progresses:	ISG	



EXAMPLES:			
a) CTO			
b) CFO			
c) CHRO			
d) Campus President (or his/her Chief of Staff)			
e) Counsel for the College			
f) Law enforcement, e.g., campus security, FBI local of	fice, Secret Service local office		
g) Public Affairs			
h) Appropriate Data Steward(s) for the type of data po	-		
i) Finance office, if credit card #, bank account #, or ot	her sensitive financial data potentially at risk		
1.5 If there is evidence of criminal activity connected with t enforcement in leading the investigation. If law enforce may be performed by law enforcement or require autho	ement (e.g., FBI) takes lead, subsequent steps	ISG	
2: DAMAGE CONTAINMENT AND DATA EXPOSURE ASSESSME ntify an Incident Response Lead and assemble an incident re duct a thorough assessment of the type and scope of data e	esponse team charged with limiting further o		ciden
	ity Group (ISG) will lead this effort	ISG/Incident	
2.1 Assemble Incident Response Team – Information Securi		190/ melacite	
2.1 Assemble Incident Response Team – Information Securi		Response	
2.1 Assemble Incident Response Team – Information Securi GUIDANCE: Ensure that the representative from the organize participates and that this individual is high enough in the org	ational unit where the incident occurred	·	



2.2 Review incident response process and responsibilities with Incident Response Team	ISG/Incident
 Provide each member with current IT Incident Checklist 	Response
- Discuss communications strategy	Team
- Stress importance of maintaining chain of custody	
GUIDANCE: Discussing the rules of communication with the team at this stage is particularly important to ensure accuracy of facts among team members and between the team and appropriate University officials.	
EXAMPLES:	
a) Team members must not discuss the incident with anyone outside the team until and only if	
authorized to do so by the Chief Information Officer or President.	
b) All documentation created by team members must be fact-based, as it may become important	
reference or evidence	
c) Daily conference call of team members will be held discuss status.	
d) Instruct team to track time spent on the incident.	
2.3 Collect and preserve evidence	ISG/Incident
	Response
GUIDANCE:	Team
Collect physical and cyber evidence that provides a clear, detailed description of how the sensitive data was compromised.	
EXAMPLES:	
a) Image of hard drive(s)Physical equipment	
b) Network traffic flow to/from compromised device	
c) Workstation and application logs	
d) Access logs	
e) Digital photographs of the evidence and surrounding area	
Resources:	
http://www.educause.edu/Resources/ForensicOverview/161135	
http://www.cybercrime.gov/ssmanual/index.html	



http://csrc.nist.gov/publications/nistpubs/800-61-rev1/SP800-61rev1.pdf	
2.4 Establish and maintain appropriate chain of custody for all evidence.	ISG/Incident
	Response
GUIDANCE:	Team
Inventory pieces of evidence and track who accessed, used, stored, moved or returned each piece of evidence	
and when it was accessed.	
EXAMPLES:	
a) Establish what exactly the evidence is	
b) Document who handled it and why	
c) Document where and how it was stored	
d) When equipment is moved, ensure that a detailed receipt is signed and dated by the previous person	
with possession, the mover and the new person with responsibility for the equipment	
Resources:	
http://www.cert.org/csirts/services.html	
http://www.sans.org/score/incidentforms/ChainOfCustody.pdf	
2.5 Take actions needed to limit the scope and magnitude of the incident	ISG/Incident
	Response
EXAMPLES:	Team
a) If the incident involves sensitive data improperly posted on one or more publicly accessible websites,	
remove active and cached content and request takedown of cached web page(s) indexed by search	
engine companies and other Internet archive entities	
b) Change passwords that may have been compromised	
c) Cease operation of a compromised application or server	



2.6 Perform forensics and document findings:	ISG/Incident
a. Analyze evidence	Response
b. Reconstruct incident	Team
c. Provide detailed documentation	
GUIDANCE: Preserve original evidence and work on a copy of data	
Obtain and preserve with minimal disturbance to units, systems and original evidence	
Results should be repeatable	
2.7 Complete final assessment and documentation of type and scope of data exposed, as well as the	ISG/Incident
availability and type of contact data for individuals affected	Response
	Team
teps to remove the cause of the exposure, reduce the impact of the exposure of the sensitive data, rest	•
: ERADICATION AND RECOVERY teps to remove the cause of the exposure, reduce the impact of the exposure of the sensitive data, rest omised or otherwise put out of service a system or network, and ensure that future risk of exposure is n 3.1. Revisit 2.4 and look for additional ways to limit exposure	nitigated
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3.3 Return evidentiary equipment and systems to service once they are secured.	
NOTIFICATION	
ine the need to give notice to individuals whose data may have been exposed by the incident. Swiftness in no	otifying those affec
ch of personally identifiable information, as well as informing certain government entities, is legally mandate	-
ling on the nature of the data, also federal law. Speed is also important from a public relations standpoint. To ps can and should be undertaken in parallel to accommodate these needs.	o this end, many of
	T T
4.1 Make decisions based upon Incident Response Team findings	Appropriate
 Does level of exposure risk warrant notification letters? 	College
- If yes,	officials
 If applicable, has law enforcement authorized notification to affected parties? Who will issue letter? 	
 Who will handle telephone and email responses to questions from affected individuals? Does 	
expected volume warrant setting up call center?	
 Does magnitude of exposure warrant a press release? Incident information website? 	
 Does exposure risk warrant free credit monitoring? 	
- If a reasonable risk of exposure does not exist, all remaining sub-steps in this section should be	
bypassed and STEP 5 Follow-up should commence.	
GUIDANCE:	
a) Those responsible for making these decisions will vary from institution to institution, but typically is a	
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 These alternatives might, for example, include, but are not limited to, one or more of the following: conspicuous posting of notices on the institution's website, press releases, email notices where addresses are known, telephone notices. c) See EDUCAUSE Data Incident Notification Toolkit for further guidance. <u>https://spaces.internet2.edu/display/2014infosecurityguide/Data+Incident+Notification+Toolkit</u> 	
4.2 Collect name and contact information on affected individuals	ISG/Incident Response
GUIDANCE: This could be a laborious process if individuals are not current students, faculty, staff, donors, patients, etc. of the institution. It is advisable that the best sources of address data for former students, faculty, and staff, as well as alumni, volunteers, contractors, and other affiliates of the institutions whose sensitive data are maintained by the institutions be identified in advance, so that notifications can be made quickly in the event of data exposures.	Team
Ensure that data is collected, transmitted and stored securely and removed when it is no longer needed.	
 4.3 Set up telephone and email support for affected individual questions: Identify appropriate person(s) to handle calls and emails Establish telephone call line/routing infrastructure, if not available Identify/set up telephone number to use Identify/set up email address to use Train individuals handling calls and emails, including providing them with a list of anticipated questions and answers 	ISG/Incident Response Team
GUIDANCE: See EDUCAUSE Data Incident Notification Toolkit – FAQ Section <u>https://spaces.internet2.edu/display/2014infosecurityguide/Data+Incident+Notification+Toolkit</u> for advice and sample content for telephone and email responder FAQs.	
 4.4 If deemed appropriate by institution officials in Sub-step 4.1, create website for affected individuals Identify URL and location Restrict access until ready to go live 	ISG/Incident Response Team



- Draft content	
GUIDANCE:	
 a) Incident websites are typically reserved for situations in which contact information for individuals affected by the breach is unknown or incomplete. b) See EDUCAUSE Data Incident Notification Toolkit – Website Section https://spaces.internet2.edu/display/2014infosecurityquide/Data+Incident+Notification+Toolkit for 	
 advice and sample content c) Website content should be approved by appropriate institution officials, e.g., CIO Executive in charge of organization in which incident occurred Office of Institutional Advancement 	
 Counsel for the institution 	
4.5 If deemed appropriate by institution officials in Sub-step 4.1, obtain free credit monitoring services for affected individuals	CFO and CIO
GUIDANCE: Obtain clear instructions to provide affected individuals signing up for free credit monitoring services and include this information in notification letters, websites, and email/telephone support FAQs.	
 4.6 If deemed appropriate by institution officials in Sub-step 4.1, prepare press release Identify contact for media Compose text for press release Develop talking points 	Office of Institutional Advancement
GUIDANCE:	
a) Press releases are often reserved for situations in which contact information for individuals affected by the breach is unknown or incomplete, but it's wise to have a pre-approved media statement in hand to use in addressing media inquiries.	
b) See EDUCAUSE Data Incident Notification Toolkit – Press Release Section https://spaces.internet2.edu/display/2014infosecurityquide/Data+Incident+Notification+Toolkit for	



 c) Content should be approved by appropriate institution officials, e.g., Executive in charge of IT for the institution, e.g., Vice President & CIO Executive in charge of organization in which incident occurred Public affairs office Counsel for the institution 	
4.7 Prepare notification letter to affected individuals	Office of
 Identify letter issuer and letterhead to be used 	Institutional
- Compose draft text	Advancement
	and TAS
GUIDANCE:	
a) See EDUCAUSE Data Incident Notification Toolkit – Letter Section	
https://spaces.internet2.edu/display/2014infosecurityquide/Data+Incident+Notification+Toolkit for	
advice and sample content.	
<i>b)</i> Letter content should be approved by appropriate institution officials, e.g.,	
• CTO	
Executive in charge of organization in which incident occurred	
Office of Institutional Advancement	
Counsel for the institution	
4.8 Prepare mailing of notification letters (postage, addresses)	Office of
- Finalize address information	Institutional
 Arrange for mail merge and printing/stuffing` of letter and envelopes 	Advancement
GUIDANCE: Avoid personalizing each letter with the affected individuals name, as this increases the risk of mismatched letters and envelopes	
4.9 If required by state law, notify the State's Attorney General within the required notification timeframe	President / CIO



4.10 Notify appropriate Federal agency as required by law	President / CIO
EXAMPLES:	
a) U.S. Department of Education when FERPA-protected student data is exposed	
b) U.S. Department of Health and Human Services when HIPAA-protected medical data is exposed	
RESOURCES:	
HIPAA: http://www.hhs.gov/ocr/privacy/	
http://www.hhs.gov/ocr/privacy/hipaa/administrative/breachnotificationrule/index.html	
FERPA: http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html	
Other data protection laws, http://protect.iu.edu/cybersecurity/data/laws	
<i>4.11</i> Notify granting organizations and research partners if research data compromised, as dictated by contractual obligations	President / CIO
 4.12 Notify appropriate third-party service providers for the institution if doing so would reduce the risk of identity theft for affected individuals or dictated by contracts. 	President / CIO/
	designated
EXAMPLES:	department
a) Employee benefit vendors	heads
b) Student services vendors	
4.13 If Credit Card data exposed, notify the credit card processor(s) or merchant banks	
	CFO
GUIDANCE: Specific notification requirements are governed by the card brand.	
EXAMPLE:	
VISA http://usa.visa.com/merchants/risk_management/cisp_if_compromised.html	



4.14 Notify Credit Bureaus as required by State and upon consultation with University Council	CFO
 4.15 Coordinate simultaneous mailing of letters to affected individuals, issuance of press release if applicable, activation of website if applicable, notifications to regulatory entities and third-party vendors. 4.16 Ensure that notification of the data breach is added to the record of access to the affected 	Student Services / Office of Institutional Advancement
individuals file as required by Federal or State law.	Registrar
<i>Ty lessons learned from the incident, implement any remediation needs, and securely store a complete record</i> 5.1 Collect staff time spent during event and record in the incident documentation (especially for those	Unit gathers
	Unit gathers data from all
5.1 Collect staff time spent during event and record in the incident documentation (especially for those	Unit gathers data from all affected parties and provides to
5.1 Collect staff time spent during event and record in the incident documentation (especially for those	Unit gathers data from all affected parties and
 5.1 Collect staff time spent during event and record in the incident documentation (especially for those cases that might be prosecuted) 5.2 Schedule a debriefing meeting two to six weeks afterwards to review what could have been done better 	Unit gathers data from all affected parties and provides to ISG President, ISG, Office of Institutional



ISG / Office of Institutional
Advancement
ISG ISG
nd



Security Incident Response

SECURITY INCIDENT RESPONSE (**DETAIL FORM**)

The following is a sample incident report. The report is an example of the types of information and incident details that will be used to track and report security incidents for Coconino Community College. The format of this report is subject to change as reporting standards and capabilities are further developed.

			C	Contact	Info	rmatio	n and In	cide	nt			
Last	Name:					Fir	st Name:					
Job ⁻	Fitle:											
Phor	ne:					Alt	Phone:					
Mobi	le:					– Pa	ager:					
Ema	il:					– Fa	IX:					
	Incident Description											
Date/Time and Recovery Information Date/Time of First Attack: Date/Time of Attack Detected:					Da	ate:				Time: _ Time: _		
Has the Attack Ended:												
Severity of Attack:												
	nated Recovery Time											
	nated Damage Accour		• •	,								
Num	ber of <i>Hosts</i> Affected:			·								
Num	ber of Users Affected:											
Туре	of Incident Detected	1:										
	Exposing Confidential/Classified/ Unclassified Data		Theft of Infor Technology Resources/ (Assets			Creating	g accounts		Alterii DNS/ / Logs	Website/Dat	∏ ta	Destroying Data
	Anonymous FTP abuse		Attacking Att Other Sites	ackers/		Credit C	Card Fraud		Frauc	I		Unauthorized Use/Access
	Using Machine Illegally		Impersonatio	n		Increas Notorie	ty of			lling a Back Trojan Hors		Attacking the Internet
	CQ Abuse/IRC Abuse		Life Threater Activity	ning		Attacke Passwo Crackin	ord		Sniffe	er		Don't Know
	Other (Specify)		, iounity			<u>e</u> ruerur	9					
Notifi	86 – Is Email cation Required?		Yes 🗌	No		386 - En	nail Sent Out?		Yes	🗌 No		
Detai	nents (Specify Incident ls and additional nation):											
						al Info	rmation					
	Did You Initially Bec							_				
	Automated Software [Notification	_	Automated Rev of Log Files	view [lanual Re og Files	eview of		Syster e., Cra Slown	,	i. 🗌	Third Party Notification
	Don't Know		Other (Specify)						2.0111			

Attack Technique (Vulnerability Exploited / Exploit Used)



Security Incident Response

	CVE/CERT VU or BugTraq Number		Virus, Trojan Horse, Worm, or Other Malicious Code		Denial of Service or Distributed Denial of Service Attack		Unauthorized Access to Affected Computer Privileged Compromise (Root/Admin Access) User Account Compromise/Web Compromise (Defacement)
	Scanning/Probing		Other				
Sus	spected perpetrator(s) or	possible motivatio	n(s) o	f attack:		
	CSU staff/students/ faculty Other (Specify)		Former staff/ students/faculty		External Party		Unknown
				N	lalicious Code		
Viru	us, Worm						
	me or Description of V						
	nti-Virus Software Ins ected Computer(s)?	stalle	d on the	Yes (F Name	Provide		D No
	the Anti-Virus Softwa	are D	etect the	Yes	No		
Viru							
vvn	en was your Anti-Viru	s So	tware Last Updated?	,			
				Ν	etwork Activity		
	tocols						
Nar	ne or Description of ∖ TCP □ □	/irus DP			IPSec [7 10	P Multicast Dpv6
	TCP U	DP] 18	P Multicast 🔲 Ipv6
Plea	ase Identify Source P	orts l	nvolved in the Attack	•			
	ase Identify Destination						
	-						
				In	npact of Attack		
Hos							
	ividual Hosts	on A	ttooking or Victim Ll	-+ 2			
	es this Host represent st Name:	. an F		st?	☐ Victim IP Address:		Attacker Both
	erating System Affect	ed:			Patch Level (if	know	/n):
Арр	lications Affected:				Database:		
Oth	ers:						
Prin	nary Purpose of this I				_		
	User Desktop Machine Domain Controller		 User Laptop Machir Domain Name Serv 		□ Web Server □ □ Time Server □	Ma NF	il Server S/File System Server Database Server
	Application Server	Ē	Other Infrastructure				
	k Hosts						
	k Host Information tails):						
	nments (Please detai	I					
	dent):						
Dat	a Compromised:	L					
Did	the attack result in a	loss/	compromise 🛛 🗋	/es (Sp	becify) 🗌 No		Other

of sensitive or personal information?



Security Incident Response

Comments:
Did the attack result in damage to system(s) or date:
Comments:
Law Enforcement Has Law Enforcement Been Notified?
Remediation:
Please detail what corrective actions have been taken (specify):
Comments:
Lessons Learned Information (Optional)
Did Your Detection and Response Process and Procedures Work as Intended?
Comments:
Please provide Discovery Methods and Monitoring Procedures that would have Improved Your Ability to Detect an Intrusion.
Comments:
Are there Improvements to Procedures and Tools that would have
Aided You in the Response Process. Comments:
Are there Improvements that would have Enhanced Your Ability to
Contain an Intrusion Comments:
Are there Correction Procedures that would have Improved Your Effectiveness in Recovering Your Systems.
Comments: