Introduction

Purpose
This policy defines a security incident and provides the procedures for notification, investigation, and reporting both during and after a security incident.

Reference
45 C.F.R. § 164.308(a)(6)

Applicability
This policy applies to all electronic data maintained by any employee, student, trainee, or volunteer of the UCD. Any data used for academic, administrative, research, or health care purposes is subject to this policy.

Policy
It is the responsibility of all UCD staff, faculty, students, trainees, and volunteers to report any real or suspected security incident to the proper authority immediately. It is the responsibility of the individual who receives a suspected security incident report to follow the procedures outlined in this policy.

Procedures
A. Security Incident

A security incident or breach is an attempted or successful acquisition, unauthorized access, use, disclosure, modification, or destruction of information or interference with system operations in an information system, in a manner not permitted under the HIPAA Security Rule which compromises the security or privacy of the PHI.

B. Response and Reporting

UCD is required to identify and respond to suspected or known security incidents; mitigate, to the extent practicable, harmful effects of known incidents; and document incidents and their outcomes. This includes improper network activity and misuse of outside data.

1. SUSPECTED INCIDENT OCCURS -- Access may occur through a misuse of Information System (“ITS”) resources that results in a widespread intentional or unintentional compromise of information security. Large scale intrusions into a computing network may lead to unauthorized access to sensitive information. A lost or stolen laptop may result in a security incident involving sensitive data.

2. INCIDENT DETECTED -- Incidents may be detected through many different means, with varying levels of detail. Automated detection capabilities include network-based and host-based intrusion detection systems, antivirus software, and log analyzers. Incidents may also be detected through manual means, such as problems reported by users. Some incidents have overt signs that can be easily detected, others are almost impossible to detect without automation. If the incident is a life threatening activity or an activity on a critical system, it must be reported immediately. If the activity includes access to non-critical systems or unauthorized activity, it must be reported within two (2) hours.

3. DO NOT DISTURB -- the data or computer. The incident may require further investigation. It is important that nothing be disturbed at this step of the procedure.

4. REPORT -- Telephone 303-724-HELP to report the incident.

5. MITIGATE – if possible, any harmful effects of the incident that are known. This may mean removing the affected device(s) from the network.

6. CATEGORIZE INCIDENT -- The individual who receives the report must categorize the incident as:

   a. Denial of Service—an attack that prevents or impairs the authorized use of networks, systems, or applications by exhausting resources such as central processing units (CPU), memory, bandwidth, and/or disk space.

   b. Malicious Code— refers to a program that is covertly inserted into another program with the intent to destroy data, run destructive or intrusive programs, or otherwise compromise the security or integrity of the victim’s
data. Malicious code is usually designed to perform these inappropriate functions without the user’s knowledge. Viruses, worms, and Trojan horses are considered forms of malicious code.

c. Unauthorized Access—occurs when a person gains logical or physical access without permission to a network, system, application, data, or other resource. Unauthorized access is typically gained through the exploitation of operating system or application vulnerabilities, by getting hold of usernames and passwords, or social engineering.

d. Inappropriate Usage—occurs when a legitimate user violates acceptable computing use policies. Examples of inappropriate use include sending spam promoting a personal business, sending email perceived as harassing individuals, etc. Inappropriate use issues may not constitute a security incident, but must be assessed by the Security Officer to determine if the inappropriate usage has created a security incident.

e. Multiple Component—a single incident that encompasses two or more incidents or falls into multiple incident categories. These incidents should be handled in line with the severest infraction involved.

7. INVESTIGATE AND RESPOND TO INCIDENT – The Security Officer will work with ITS and the impacted campus unit to investigate and respond to the incident and mitigate any harmful effects of the incident, if possible.

Or, if appropriate, the SECURITY OFFICER CONVENES INCIDENT RESPONSE TEAM – If the incident cannot be handled by the Security Officer and/or ITS, the Security Officer will call an ad hoc meeting of appropriate individuals to make up an incident response team to investigate and respond to the incident. The ad-hoc group may be composed of the following members or their representatives, as determined by the Security Officer to appropriately respond to the incident:

- Assistant Vice Chancellor of Information Systems;
- Registrar (if student data);
- Assistant Vice Chancellor, Human Resources;
- UCD Legal Counsel;
- Vice Chancellor of affected unit;
- Dean, Director, Chair, or Head of affected unit;
- Public Relations;
- Police (UCD or CU System);
- Appropriate ITS personnel;
- UCD Privacy Officer;
- LAN Administrator of affected unit;
• Others, as determined by Security Officer.

If the incident is of significant magnitude, the following members should be considered by the Security Officer for inclusion in the group:

• Internal Audit;
• CU-System Legal Counsel;
• CU-System Public Relations;
• CU-System Privacy Officer;
• Other CU Campus Information Technology or ITS Offices;
• Risk Management.

8. DOCUMENT – the incident, investigation, response, and outcome. The Security Officer, ITS, and/or the Response Team must document the security incident, investigation of the incident, and response and remediation. The Security Officer is responsible for retaining documentation of incidents.

9. CONCLUSION -- The Security Officer, ITS and/or the Response Team should determine if policies or procedures need to be implemented to prevent a reoccurrence of the incident or if additional campus education or purchase of network or computing security devices are needed to prevent similar future incidents.

C. Documentation

1. All breach notification activities will be managed by the ORC with the assistance and cooperation of involved UCD staff and departments. This includes notice to affected individuals and to the Secretary of HHS and the HHS Office of Civil Rights.

2. Security incident procedure documentation and changes shall be retained for six (6) years.
APPENDIX B

Security Incident Log

Date and Time Reported: ________________________________

Reported to (name of person receiving report): ________________________________

Date and Time of Incident: ________________________________

Category of Incident: ________________________________

Contact information for system owner—

Name: ________________________________________________

Unit/Dept/College/School: ________________________________

Location: ________________________________________________

Phone Numbers: ________________________________

Device serial number and model number: ________________________________

Computer name: ________________________________________________

MAC address: ________________________________________________

IP address: ________________________________________________

Witnesses/other parties of interest: ________________________________

Who will take the lead in coordinating the investigation?

______________________________________________

Members of investigating team: ________________________________

Summary of Incident (attach sheet if necessary):

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

Is there sensitive data involved and explain: ________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________
Is the incident over? \(\theta\) Yes \(\theta\) No

If the incident is likely to result in criminal or civil legal action, 
\(\theta\) Preserve the evidence and halt/isolate the incident as appropriate.

What is the risk? Who will be impacted (dept/unit, campus, University)?

Outline the steps to be taken:

At conclusion of the investigation, were the individuals affected by the incident notified?

\(\theta\) Yes \(\theta\) No (If yes, attach a copy of that correspondence.)

Has a final report of the incident, investigation, response, and remediation been written?

\(\theta\) Yes \(\theta\) No (Attach a copy of the report.)