



IT Security and Personally Identifiable Information (PII) Incident Response within HHS and IHS

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Breach Response at HHS: Definition

Breach Defined:

*A breach is the “loss of control, compromise, unauthorized disclosure, unauthorized acquisition, unauthorized access, or any similar term referring to situations where persons other than authorized users and for an other than authorized purpose have access or potential access to personally identifiable information whether physical or electronic.”**

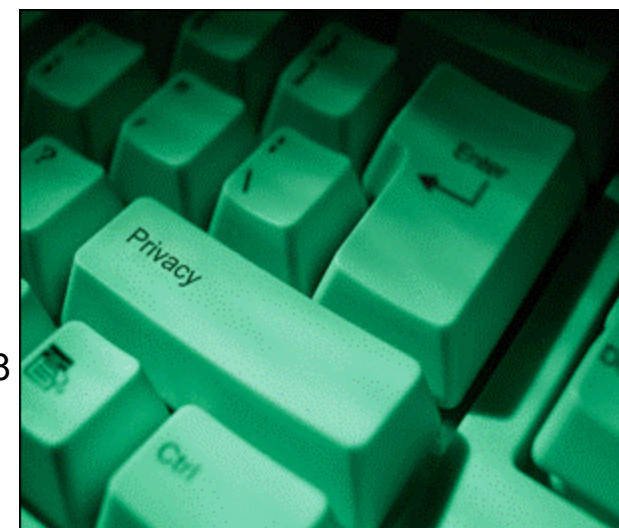
- ▶ Types of breaches include, but are not limited to:
 - Losing federal, contractor, or personal electronic devices that store PII (e.g., laptops, cell phones that can store data, disks, thumb-drives, flash drives, compact disks, etc.)
 - Sharing paper or electronic documents containing PII with unauthorized individuals
 - Posting PII to a public Website (intentionally or unintentionally)
 - Mailing hard copy documents containing PII to the incorrect address
 - Leaving documents containing PII exposed in an area where individuals without approved access could read, copy, or move for future use

* Office of Management and Budget (OMB) Memorandum (M) 07-16, *Safeguarding Against and Responding to the Breach of Personally Identifiable Information*



Breach Response at HHS: Legislative History

- ▶ Congress and the Executive Branch are specifying standards and holding Agencies accountable for IT security and privacy
 - Privacy Act of 1974
 - E-Government Act of 2002 - Federal Information Security Management Act (FISMA)
 - President's Management Agenda (PMA)
 - Executive Order 13402, *Strengthening Federal Efforts to Protect Against Identity Theft*
 - Office of Management and Budget (OMB) Memoranda (M):
 - *Recommendations for Identity Theft Related Data Breach Notification*, dated September 20, 2006
 - M-07-16, *Safeguarding Against and Responding to the Breach of Personally Identifiable Information*, dated May 22, 2007
- ▶ In response to federal mandates, HHS created a Breach Response Team (BRT) and corresponding documents
 - HHS Policy for Responding to Breaches of PII, dated November 17, 2008
 - PII BRT Charter, dated November 17, 2008
 - PII BRT Standard Operating Procedures (SOP), dated October 31, 2008



Breach Response at HHS: The Consequences

► Consequences of IT Security and Privacy Risks:

- Risks to Agency / Department Reputation
 - Loss of public trust and confidence
 - Loss of credibility
 - Inability to meet its mission and vision
- Risks to Operations
 - Breach of national security
 - Shutdown of services
- Risk of Congressional and Oversight Scrutiny
 - Initiation of Government Accountability Office (GAO) audit
 - Summons to testify



- Risk of Legal Action
- Risk to Sensitive Information and Privacy
 - Shift of focus from security to legal action
 - Loss / misuse of sensitive medical information
 - Loss / misuse of proprietary information
 - Loss / misuse of intellectual capital
- Risk of Financial Loss
 - Loss of OMB funding



Breach Response at HHS: History of the BRT

- ▶ HHS established a BRT in compliance with two OMB memoranda
 - Recommendations for Identity Theft Related Data Breach Notification, released on September 20, 2006
 - M-07-16, Safeguarding Against and Responding to the Breach of Personally Identifiable Information, released on May 22, 2007
- ▶ The BRT is comprised of several of the Department's senior leaders
- ▶ Senior leadership engages in risk analysis to determine whether a potential or confirmed breach of PII poses problems related to identity theft and/or any applicable federal law or policy

Additional information can be found within the BRT Charter, Policy, and Standard Operating Procedures located on Secure One HHS Online (<http://intranet.hhs.gov/infosec/>)

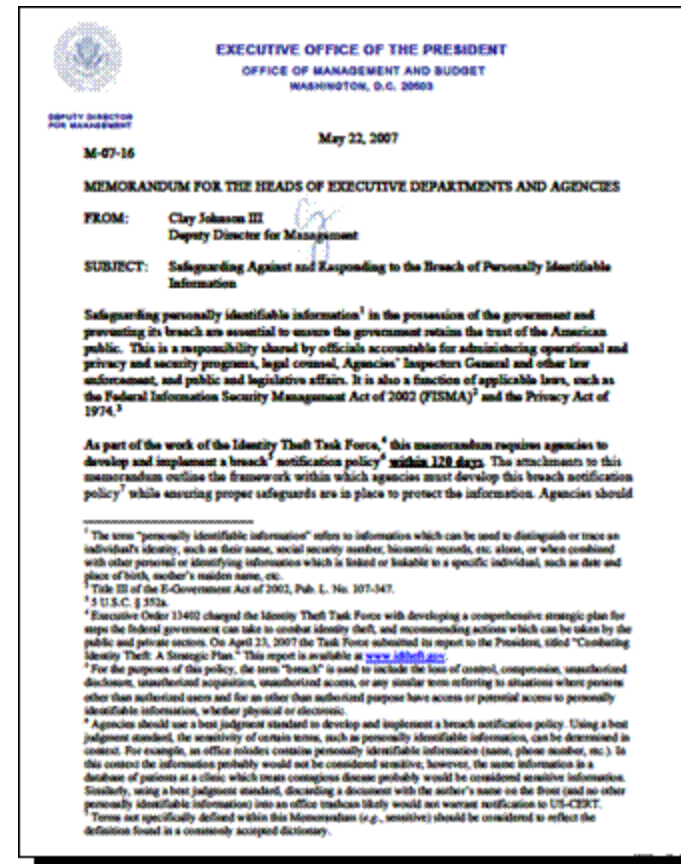


Photo Source: Whitehouse.gov



Breach Response at HHS: BRT's Primary Roles & Responsibilities

- ▶ Evaluate breaches or suspected breaches of personal information
- ▶ Evaluate all alternatives that are directly proportional to the incident to decide what actions should be taken
- ▶ Ensure proper and timely reporting, notification, and follow-up with stakeholders
- ▶ Work closely with the HHS Information Security and Privacy Program to coordinate Departmental response activities and data collection, as needed
- ▶ Refer Health Insurance Portability and Accountability Act (HIPAA) incidents to the Office for Civil Rights, or Centers for Medicare & Medicaid Services (CMS) Office of E-Health Standards and Services (OEHS), as appropriate
- ▶ Notify appropriate internal HHS stakeholders, as directed
- ▶ Provide notification and assessment of breaches to the Risk Management and Financial Oversight Board (RMFOB)



Breach Response at HHS: Incident Response Capability

- ▶ Maintaining an incident response capability is beneficial in: *
 - Responding to incidents systematically so that the appropriate steps are taken
 - Helping personnel to recover quickly and efficiently from security incidents, minimizing loss or theft of information and disruption of services
 - Using knowledge gained during incident handling to prepare for future incidents and provide stronger protection for systems and data
 - Addressing legal issues that may arise during incidents

*National Institute of Standards and Technology (NIST)
Special Publication (SP) 800-61, Revision 1



Photo Source: USA.gov



Breach Response at HHS: Process

What happens when an incident involving PII is reported?



1. Operating Division (OPDIV) contact reports the incident to the HHS Computer Security Incident Response Center (HHS CSIRC) via the Internal Incident Summary form*
2. BRT Coordinator determines if the information is complete and sufficient to support the OPDIV's initial assessment
 - BRT may request CIRSC obtain additional information from the OPDIV on the details specified within the Internal Incident Summary form
3. BRT Coordinator performs initial risk assessment to determine the likelihood of losing PII, and the impact to the OPDIV if PII is exploited



Breach Response at HHS: Process (continued)

4. BRT Coordinator uses these results, plus the Risk Matrix*, to determine the overall risk level to the OPDIV and / or the Department
5. BRT Coordinator requests that the OPDIV develop a Risk Assessment and Breach Response Plan
 - BRT Coordinator forwards the Risk Assessment and Breach Response Plan to the BRT for review and comment
 - The incident is also included in the Department's PII Weekly Breach Report , which the BRT members must review and acknowledge whether any action is necessary on the open items within the report
6. BRT Coordinator informs the OPDIV of the approved documents or advises of any further recommendations
7. OPDIV implements approved risk assessment, Breach Response Plan, and additional recommendations
 - BRT determines if notification is necessary, and if so, informs the OPDIV

* The Risk Matrix can be found in the BRT Standard Operating Procedures



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Breach Response at IHS



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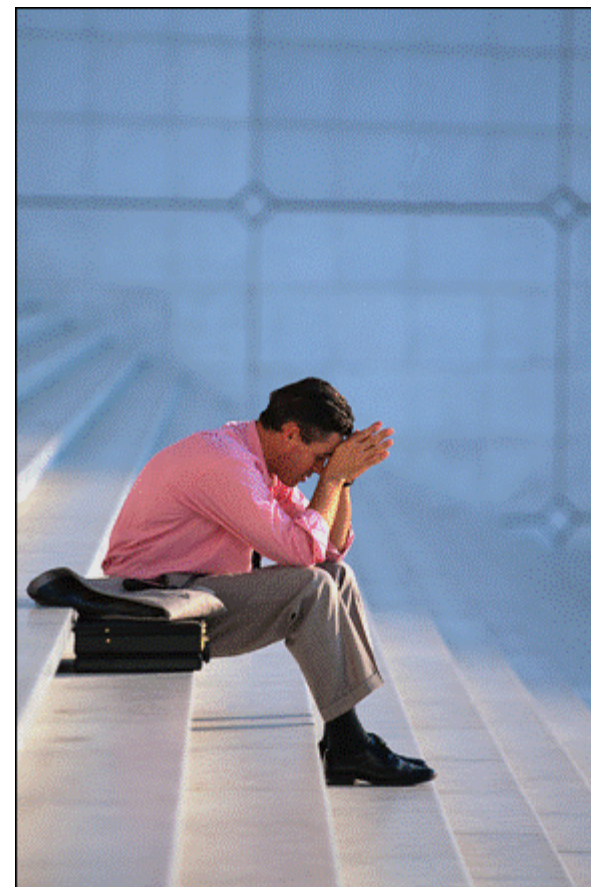
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Hypothetical PII Breach: Background

- ▶ IHS employee believes that an unencrypted Universal Serial Bus (USB) thumb drive has been lost or stolen
 - Person does not believe the USB thumb drive contained work-related materials
- ▶ Two months pass, and the employee recalls saving files from a study that may have contained PII
- ▶ Employee reports the missing USB thumb drive to IHS managers





Hypothetical PII Breach: Initial Notification of the Breach to HHS CSIRC

- ▶ IHS Managers go through the OPDIV's own breach response plan and designate it as a low risk incident
- ▶ IHS Managers complete the *Internal Incident Summary* and send the it to HHS CSIRC
 - IHS indicates that the USB drive contained the PII of more than 50,000 individuals





Hypothetical PII Breach: HHS CSIRC and BRT Involvement

- ▶ HHS CSIRC identifies the incident as containing PII and classifies it as a medium risk
- ▶ HHS CSIRC sends the *Internal Incident Summary* to the BRT
 - HHS CSIRC includes the incident in the *PII Weekly Breach Report*
- ▶ BRT Coordinator requests HHS CSIRC obtain additional information from IHS regarding the type of PII on the USB thumb drive



Hypothetical PII Breach: BRT Evaluates the Risk

- ▶ IHS provides additional information to the BRT via HHS CSIRC
- ▶ BRT convenes via teleconference to discuss the incident and requests an IHS representative join the call
 - New information revealed during the discussion indicates that the USB thumb drive was most likely stolen from a locked drawer inside an secure IHS facility
- ▶ BRT reviews the facts, discusses the potential outcomes of the lost data, and discusses the affect to the Department
- ▶ BRT categorizes the incident as a high risk given the likelihood, considering the nature and cause of threats and vulnerabilities, and the impact or potential harm that could come from a threat exploitation
- ▶ BRT requests IHS to develop a Breach Response Plan



Hypothetical PII Breach: Mitigating the Risk

- ▶ BRT asks IHS to carry out their Breach Response Plan, and draft a notification letter to the affected individuals for the BRT to review prior to release
- ▶ The IHS draft letter includes:
 - Information on the facts of the breach
 - Steps taken to remedy the situation
 - Options for affected individuals to monitor and protect their credit
- ▶ BRT approves letter and it is released to the affected individuals
- ▶ BRT will continue to follow-up and provide guidance, as necessary





Failure to establish and maintain integrated security and privacy practices can have a significant impact on government agencies

IN THE HEADLINES...

Walter Reed says patient data may be compromised

The Associated Press, June 2, 2008

“Sensitive information on about 1,000 patients at Walter Reed Army Medical Center and other military hospitals was exposed in a security breach.”

Man arrested in theft of 1.8 million Social Security numbers

The Associated Press, November 16, 2007

“About 1.8 million SSNs from the U.S. Department of Veteran Affairs uncovered from a home computer.”

TSA seeks hard drive, personal data for 100,000

USA Today, May 5, 2007

“Personal and financial records of 100,000 TSA employees lost.”

“Stolen computer hard drive contained bank account numbers, SSNs, names, and birth dates”

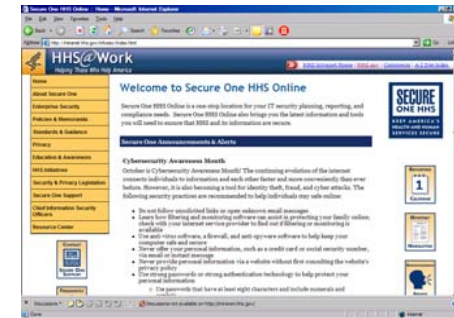




Secure One HHS has multiple resources to help OPDIVs implement robust information security programs

- ▶ **Secure One HHS Intranet**
 - Provides an internal online resource (<http://intranet.hhs.gov/infosec/index.html>)
- ▶ **Secure One HHS Internet**
 - Provides an external online resource (<http://www.hhs.gov/ocio/securityprivacy/index.html>)
- ▶ **Secure One HHS Portal**
 - Provides an online collaboration workspace (<https://ociportal.hhs.gov/secureonehhs/default.aspx>)
- ▶ **Secure One Support (SOS)**
 - Provides support for the HHS Information Security Program via email at: SecureOne.HHS@hhs.gov or via phone at: **202.205.9581**

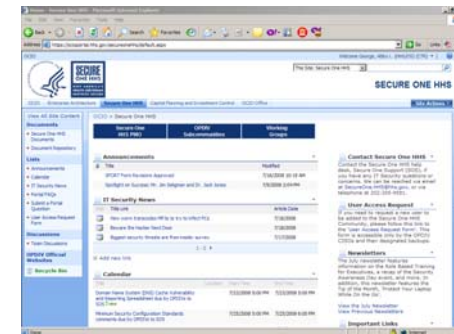
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