

**GUIDANCE SPECIFYING THE TECHNOLOGIES AND METHODOLOGIES  
THAT RENDER PROTECTED HEALTH INFORMATION UNUSABLE, UNREADABLE, OR  
INDECIPHERABLE TO UNAUTHORIZED INDIVIDUALS**

Protected health information (“PHI”) is rendered unusable, unreadable, or indecipherable to unauthorized individuals if one or more of the following applies:

- (a) Electronic PHI has been encrypted as specified in the HIPAA Security Rule by “the use of an algorithmic process to transform data into a form in which there is a low probability of assigning meaning without use of a confidential process or key”<sup>1</sup> and such confidential process or key that might enable decryption has not been breached. To avoid a breach of the confidential process or key, these decryption tools should be stored on a device or at a location separate from the data they are used to encrypt or decrypt. The encryption processes identified below have been tested by the National Institute of Standards and Technology (NIST) and judged to meet this standard.
  - (i) Valid encryption processes for data at rest are consistent with NIST Special Publication 800–111, Guide to Storage Encryption Technologies for End User Devices.<sup>2 3</sup>
  - (ii) Valid encryption processes for data in motion are those which comply, as appropriate, with NIST Special Publications 800–52, Guidelines for the Selection and Use of Transport Layer Security (TLS) Implementations; 800–77, Guide to IPsec VPNs; or 800–113, Guide to SSL VPNs, or others which are Federal Information Processing Standards (FIPS) 140–2 validated.<sup>4</sup>
  
- (b) The media on which the PHI is stored or recorded have been destroyed in one of the following ways:
  - (i) Paper, film, or other hard copy media have been shredded or destroyed such that the PHI cannot be read or otherwise cannot be reconstructed. Redaction is specifically excluded as a means of data destruction.
  - (ii) Electronic media have been cleared, purged, or destroyed consistent with NIST Special Publication 800–88, Guidelines for Media Sanitization,<sup>5</sup> such that the PHI cannot be retrieved.

---

<sup>1</sup> 45 CFR §164.304, definition of “encryption”

<sup>2</sup> NIST Roadmap plans include the development of security guidelines for enterprise-level storage devices, and such guidelines will be considered in updates to this guidance, when available

<sup>3</sup> Available at <http://www.csrc.nist.gov>

<sup>4</sup> Available at <http://www.csrc.nist.gov>

<sup>5</sup> Available at <http://www.csrc.nist.gov>