

# Top 3 attack vectors in 2025 healthcare email security

In 2025, the HHS recorded 170 email-related breaches affecting 2.5 million individuals, shifting focus from technical bypasses to exploiting human trust, fast-moving workflows, and vendor relationships.

## The 2025 breach landscape

**2.5 Million+**  
individuals affected

**\$7.5 Million**  
average cost



### The failure of user judgement

Most breaches succeed because security assumes users will catch deception before damage occurs.

## The top 3 attack patterns



### Mailbox takeover (Phishing)

Attacker steal credentials to access patient data while appearing as legitimate users.



### Impersonation & BEC

Exploiting trust by mimicking executives or vendors via Google Cloud or Direct messaging.



### Vendor & business associate exposure

PHI is leaked through compromised third-party accounts or insecure communication channels.