

Anatomy of a Breach: Why Ransomware Hits Healthcare Harder

Healthcare’s defenses are weak, its data is vital — and threat actors know it.

An Ounce of Prevention Needed

Healthcare Organizations Know They’re at Risk — but Struggle to Get Ahead of It

Healthcare remains a top target for ransomware, but many organizations lack the preventative measures needed to defend against modern threats. Based on Veeam's 2025 ransomware survey, healthcare leaders recognized the risks but couldn't act fast enough.



only 13% of healthcare orgs felt “completely prepared” before an attack (less than half the rate of other sectors – 27%)



admitted they were “not prepared” at all (double the rate of other industries – 5%)

Inadequate Ransomware Prep Leaves Few Good Remedies

Attacks Hit Hard — and Recovery Often Fails Without Strong Backups

Weak preparedness led to devastating outcomes for healthcare organizations, from encrypted data to compromised backups. Many paid ransoms but still couldn’t recover, putting care continuity and patient safety at risk.

Ransomware Fallout: Data Encrypted, Backups Compromised, and Recovery Still Elusive

35% of production data was encrypted during attacks

27% of backups were modified or deleted

81% saw backup repositories targeted

47% Healthcare organizations were 47% more likely than others to pay a ransom and still not recover their data

57% had backups impacted

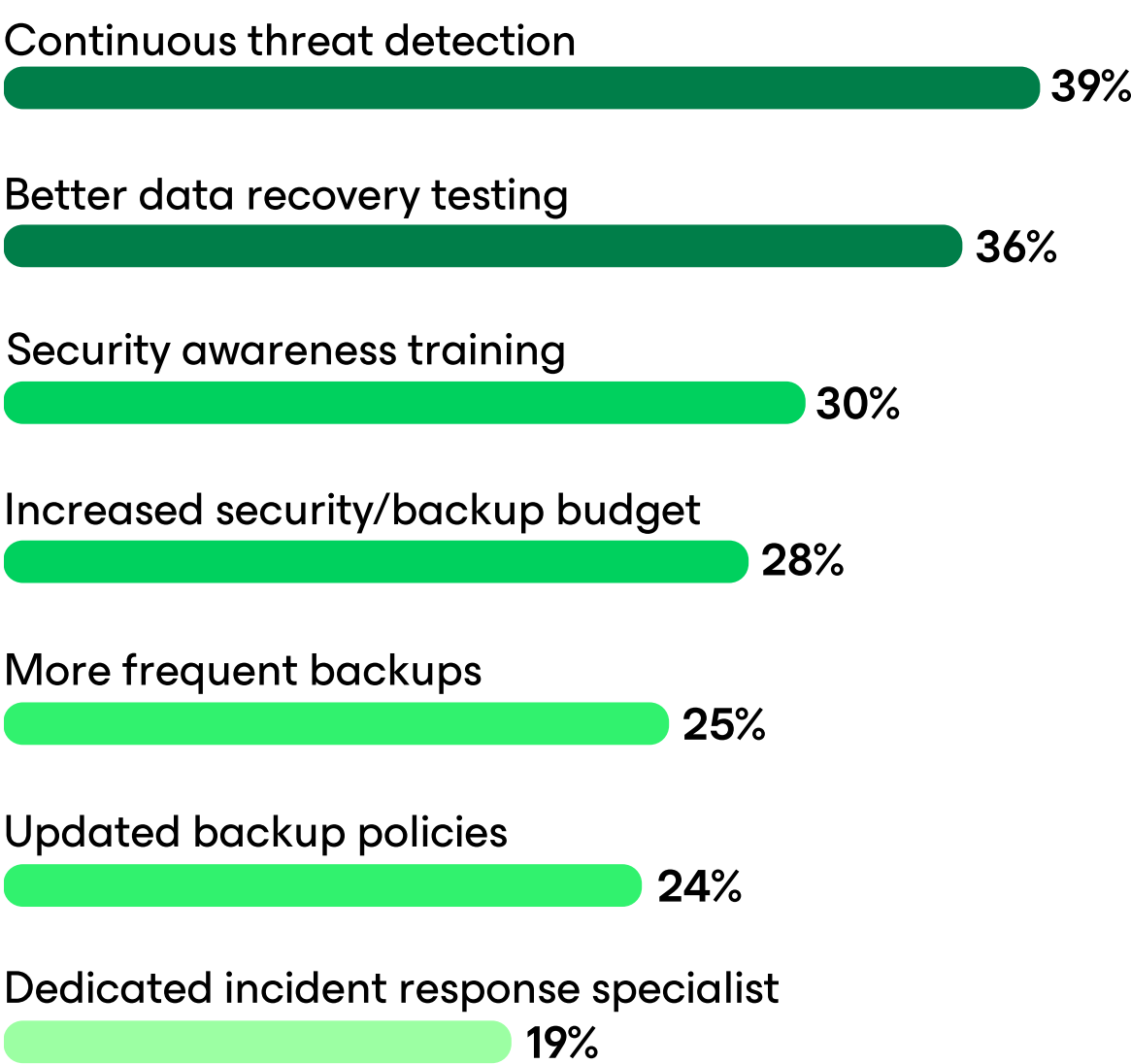
Paying ransoms doesn't guarantee recovery — and it fuels future attacks.

A Clear Prescription for Reducing Impacts

Stronger Detection, Recovery, and Planning Can Turn the Tide

Healthcare leaders know what they would do differently next time. From better detection to more rigorous backup testing, these missed opportunities highlight a clear path forward.

Top “Wish We Had” Actions



Key Elements of a Ransomware Response Playbook

- ✓ Incident Response Roles & Responsibilities
- ✓ Communication Plan
- ✓ Data Backup Strategy
- ✓ Legal/PR Protocols
- ✓ External Vendor Contacts
- ✓ Recovery Timeline

Having these elements in place before an incident enhances resilience and speeds recovery.

What Veeam Customers Say

“Veeam is an unsung hero in our organization because it protects the data supporting patient care.”

Chuck Marshburn

CIO & HIPAA Security Officer, South Georgia Medical Center



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