

# Remediation Checklist

**This checklist is for whoever is fixing the issues found in your pentest.** It could be your IT person, your MSP, a freelance developer, or your internal team. Each item has step-by-step instructions. Check the box when it's done. Once everything is complete, request your free re-test from Milo to verify the fixes.

Client	Report ID	Test Date	Total Findings
Acme Health Services	MILO-2026-03-00847	March 3–4, 2026	3 (0 Critical, 0 High, 1 Medium, 2 Low)

Priority	Finding	Severity	Deadline
1	Session Token Predictability	Medium	April 3, 2026
2	Missing Content Security Policy Headers	Low	May 4, 2026
3	Server Version Disclosure	Low	May 4, 2026

## Finding #1: Session Token Predictability

**MEDIUM**

**Affected System:** portal.acmehealth.com (Patient Portal)

**What's Wrong:** The patient portal creates predictable login session keys. An attacker could guess valid keys and access patient accounts without a password.

**Deadline:** April 3, 2026 (30 days from test date)

Step	Action
1	<p><b>Replace session token generator.</b> Your current code uses a predictable algorithm. Replace it with a cryptographically secure random number generator (CSPRNG). In Node.js: use <code>crypto.randomBytes(32).toString('hex')</code>. In Python: use <code>secrets.token_hex(32)</code>. In PHP: use <code>bin2hex(random_bytes(32))</code>.</p>

■	2	<b>Remove predictable components from tokens.</b> The current tokens include a timestamp prefix (ACME-SESS-YYYYMMDD). Remove all date, time, and sequential components. The entire token should be random.
■	3	<b>Ensure minimum 128-bit entropy.</b> Token length should be at least 32 hex characters (128 bits). The current tokens have approximately 32 bits of effective entropy in the variable portion, which is insufficient.
■	4	<b>Add session rotation on auth changes.</b> Generate a new session token whenever a user logs in, changes their password, or elevates privileges. Invalidate the previous token.
■	5	<b>Test your fix.</b> After deploying, create 10+ sessions in rapid succession and verify that tokens share no common prefixes or patterns. Each token should appear completely random.

## Finding #2: Missing Content Security Policy Headers

LOW

**Affected System:** www.acmehealth.com (Main Website)

**What's Wrong:** Your website is missing security headers that tell browsers which content is allowed to load. This makes it easier for attackers to inject malicious scripts.

**Deadline:** May 4, 2026 (60 days from test date)

■	Step	Action
■	1	<b>Add Content-Security-Policy header.</b> Start with a restrictive policy and loosen as needed. Example starting point: <code>Content-Security-Policy: default-src 'self'; script-src 'self'; style-src 'self' 'unsafe-inline'; img-src 'self' data:.</code> Test thoroughly — CSP can break things if too restrictive.
■	2	<b>Add X-Content-Type-Options header.</b> Add to your server config: <code>X-Content-Type-Options: nosniff.</code> This prevents browsers from interpreting files as a different type than declared.
■	3	<b>Add X-Frame-Options header.</b> Add: <code>X-Frame-Options: DENY</code> (or SAMEORIGIN if your site uses iframes). This prevents clickjacking attacks.
■	4	<b>Add Referrer-Policy header.</b> Add: <code>Referrer-Policy: strict-origin-when-cross-origin.</code> This limits how much URL information is shared with other sites.

■	<b>5</b>	<b>Verify headers are present.</b> After deploying, check your headers at <a href="https://securityheaders.com">securityheaders.com</a> — enter your URL and confirm all four headers appear correctly.
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### Finding #3: Server Version Disclosure

**LOW**

**Affected System:** api.acmehealth.com (API Server)

**What's Wrong:** Your server is broadcasting exactly what software and version it runs. This helps attackers target known vulnerabilities for that version.

**Deadline:** May 4, 2026 (60 days from test date)

	Step	Action
■	<b>1</b>	<b>Suppress nginx version.</b> Open your nginx configuration file (usually <code>/etc/nginx/nginx.conf</code> ) and add <code>server_tokens off;</code> inside the <code>http { }</code> block. Save and restart nginx: <code>sudo nginx -t &amp;&amp; sudo systemctl reload nginx.</code>
■	<b>2</b>	<b>Remove Express X-Powered-By header.</b> In your main Express application file (usually <code>app.js</code> or <code>server.js</code> ), add this line near the top: <code>app.disable("x-powered-by");</code> . Redeploy the application.
■	<b>3</b>	<b>Verify headers are suppressed.</b> Run: <code>curl -I https://api.acmehealth.com</code> and confirm that the response no longer includes <code>Server: nginx/1.24.0</code> Or <code>X-Powered-By: Express</code> . The Server header may still say "nginx" without the version — that is acceptable.

**All items fixed? Request your free re-test.**

Once you've completed all the steps above, Milo will re-test your systems at no additional cost to verify everything is resolved. Your report will be updated with a clean addendum confirming all findings have been remediated.

**Email:** [support@milosecurity.com](mailto:support@milosecurity.com)

**Subject line:** Re-Test Request — MILO-2026-03-00847

Or visit [www.milosecurity.com/retest](http://www.milosecurity.com/retest) and enter your Report ID.

This checklist corresponds to Milo Penetration Test Report MILO-2026-03-00847. For full technical details, evidence, and compliance mappings, refer to the complete report.